

ALTERNITY

Science Fiction Roleplaying Game

Gamemaster Guide



by Richard Baker and Bill Slavicsek



ALTERNITY[®]

Science Fiction Roleplaying Game

GAMEMASTER GUIDE

Rules for modern to far-future
roleplaying games

by Richard Baker and Bill Slavicsek

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FOREWORD

I've been looking forward to this day. Somewhere, an SF or roleplaying fan is holding this book in his or her hands . . . and that means that the ALTERNITY game is Out There, no longer a stack of paper and notes on my desk but a living and breathing game. That's a good feeling, amigo!

The ALTERNITY concept took form in early 1995. Three people—Lester Smith, Dori Hein, and Bill Slavicsek—were the driving force behind the ALTERNITY proposal. They drew up the framework under which the ALTERNITY game became possible. They thought it ought to be done. You wouldn't be reading these words without them.

My association with the ALTERNITY game began in November 1995, when I was brought onto the team. At the time, Bill had the concept and the sketch of a system; my job was to help him build a three-dimensional game from these beginnings. So we met for hours each day through the winter of 1996, hammering out The Rules. Those intense skull sessions were the crucible of the game. We've changed plenty of things since, but for the most part, the game's the same one that Bill and I worked out piece by piece in the TSR Games Library, filling notepads with dozens of pages of scribbled thoughts and mechanics.

More than any other project that I've worked on at TSR, this game changed the way I look at things. It revitalized my love of science fiction and spurred me to start tracking down the classic or groundbreaking books I'd never gotten around to reading. I make a point of checking out the used-

book stores now, looking for out-of-print titles that might be on my reading list. I've also found that my interest in the science behind science fiction has grown tenfold. It's an astonishing universe out there. Who cares what's on TV when you can step outside on a starry night and see all the way to the end of time? Long after I finish this project, I'm going to take that sense of wonder with me. I hope it's the same for you.

Rich Baker
February 2, 1998

We're done! It started years ago as a memo suggesting a way to expand TSR's roleplaying audience and it became the single largest undertaking of my career.

I'm going to have to catch my breath and thank loads of people who helped make the ALTERNITY game come together: Rich Baker, Lester Smith, Dori Hein, Kim Mohan, David Eckelberry, Jim Butler, Keith Strohm, Randy Post, Dee Barnett, Angie Lokotz, Paul Hanchette, Dawn Murin, Dana Knutson, Dennis Kauth, Rob Lazzaretti, Bruce Heard, Monte Cook, and Sean Reynolds. Whew! And I probably forgot somebody! Anyway, we're done! And you know something? The work is just beginning. . . .

Bill Slavicsek
February 2, 1998

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INTRODUCTION

What's your vision of the future? Do you see an age of exploration and discovery as humanity spans the void between the stars? An era of colonization and hope, with populated worlds shining like a thousand jewels in the immensity of space and time?

Or do you harbor darker expectations for the future? Do you fear the specter of unending war? Do you see years of unspeakable horror and madness ahead, ages of chaos and decay beneath the silent, uncaring stars?

Chances are, the truth lies somewhere between our brightest hopes and our most abysmal fears.

We won't know what the future holds until we experience it in person—but it's the nature of the human mind to speculate, to wonder, to make up stories and spin possibilities about what might come to pass in the years ahead.

That's where you come in. You're about to find out what goes into creating exciting science fiction roleplaying adventures about tomorrow that you and your friends can experience today. What's your vision of the future? Think about it.

So, which future do you want to play?

WHAT IS THE ALTERNITY GAME?

The *ALTERNITY Player's Handbook* and *Gamemaster Guide* combine to form a roleplaying game system for simulating modern to far-future adventures. The *ALTERNITY* rules will show you how you and your friends can create science fiction roleplaying stories together.

Think of any science fiction movie, television show, comic book, novel, or short story you've ever read—with the *ALTERNITY* rules, you can rewrite or revisit these amazing tales using heroes, villains, aliens, plots, and stories of your own invention. Your imagination is the only limit. As you play the *ALTERNITY* game, you and your friends will shape this vision, explore it, expand it, and create your own unique worlds of wonder and adventure.

Imagine a future in which humanity can travel from star to star, or one in which humans aren't alone in the universe. Imagine a world in which a few supersecret agents fight against an unseen menace that masquerades as people of great power and high station. Or think of a world where the Cold War was fought with bombs and missiles instead of rhetoric and posturing, a world ravaged by nuclear war—how would the heroes of this kind of future try to put things back together again? Science fiction is an amazingly broad field, and the *ALTERNITY* game lets you explore your own vision of the future as you wish.

If you think that you're ready to plunge into imaginative futures, then you'll find that the *ALTERNITY* game is the perfect vehicle for your journey. Bring your own vision, your own style, your own experience to the table, and get ready for the time of your life.

WHAT IS ROLEPLAYING?

When you were young, you probably played all kinds of make-believe games such as cops and robbers or cowboys and Indians. A roleplaying game adds rules to a make-believe game. Each player creates an imaginary character and describes that character in terms of how strong, how fast, how tough, and how smart he or she is.

Here's another way to look at it. Imagine that you're playing a video game. The hero of the game is a hulking soldier trapped in a wrecked space station with a nasty alien monster. What can you make your video hero do? He can open doors, climb ladders, or jump to ledges as you manipulate the control pad. You make decisions about which way the hero goes and which weapons he uses, thus determining the course of the adventure.

Now imagine that the video hero has the ability to talk to the alien monster. Maybe you can have the hero give the alien something so he can pass by without fighting, or you can have him bluff his way past, convincing the creature that he's supposed to go to the reactor core. Imagine that the game lets you try, say, or

do anything you can think of. That's the relationship between a player and his hero in a roleplaying game.

In a roleplaying game, you don't have a television or computer screen to show you where your hero is standing, which way he's facing, or what's challenging him at the moment. Instead, another player—called the Gamemaster—runs the game. He or she tells you what the scene looks like, what's happening around the hero, and other pertinent details. The Gamemaster directs the action according to the decisions the players make.

Who Can Play?

Anyone who wants to can play the *ALTERNITY* game, though the recommended starting age is 10. One player must be the Gamemaster. In addition to the Gamemaster, you need at least one other player or as many as ten, but you'll find that game sessions work best with groups of four to six other players.

How Do You Win?

Unlike other games, roleplaying games aren't necessarily about winning and losing. The goal of a roleplaying game session is to create a satisfying "group story." The Gamemaster isn't out to defeat the heroes, and the players aren't out to "beat" each other. Instead, the players and the Gamemaster interact to advance the story and find out what happens to the heroes from one adventure to the next.

In this way, roleplaying games don't technically end. Each adventure may come to a conclusion, and a game session may run its course by the end of the evening, but you can always come back to these heroes to continue the story. It's just like a television show or movie sequels. An adventure is a single episode or motion picture, but the ongoing story—called a campaign—can continue for an entire broadcast season or over the course of several subsequent movies. Heroes grow and improve from adventure to adventure, gaining more expertise and personal power as the campaign unfolds.

Roleplaying Alternate Tomorrows

The ALTERNITY game is a comprehensive roleplaying game with a foundation of core rules that can be used in a variety of settings. Each of these settings is referred to as an alternate tomorrow. Your campaign can revolve around heroes in a contemporary setting who battle terrorists, super-spies, and criminals of all descriptions. Or you can set your campaign 500 years in the future, allowing the heroes to explore the galaxy in faster-than-light ships. Both of these settings and a dozen more can be used for an ALTERNITY game, creating vastly different alternate tomorrows to run adventures in.

How to Use This Book

The ALTERNITY Gamemaster Guide is designed specifically for Gamemasters, providing rules and advice on running game sessions and creating ongoing ALTERNITY campaigns. You need the ALTERNITY *Player's Handbook* in order to have the complete rules package.

Getting Started

Start with *Chapter 1: Fast-Play Rules* in the *Player's Handbook*. After you read the fast-play rules for heroes, come back to this book and read the corresponding chapter for Gamemasters. It provides an overview of the Gamemaster's role and presents a short adventure that introduces

Read Both Books!

If you're going to take on the role of Gamemaster for your gaming group (or if you plan to share the role with another player), you need to start by reading the *Player's Handbook*. It presents the concepts and rules of the ALTERNITY game in a clear, systematic fashion.

It's important for you to realize that the *Gamemaster Guide* is not just the Gamemaster's "version" of the *Player's Handbook*—you need to be completely familiar with both books in order to do a good job of being a Gamemaster.

you and your players to the ALTERNITY game.

Then . . .

After Chapter 1, both books go into more detail and add more rules to build a complete roleplaying game. Remember, you only need to use the rules you and your players want. If detail and systems are what you like, it's in here. If you think that too many rules get in the way of roleplaying, use just what you're comfortable with.

The early chapters of the *Gamemaster Guide* mirror their counterparts in the *Player's Handbook*—covering the same topics, but looking at those topics from the Gamemaster's perspective.

Chapter 2: Hero Creation goes beyond the scope of its counterpart in the *Player's Handbook*, providing you with alternate ways of defining the heroes who will start their adventuring careers in your campaign. You'll also get an overview of how to design an alien species, which you can use to inject variety and uniqueness into your game.

Chapter 3: Gamemasters in Action is the longest chapter in this book. Most of its pages are devoted to a discussion of all the rules you'll need to run combat scenes. This is the part of the book you'll refer to most often during a game session.

Chapter 4: Skills and *Chapter 5: Perks & Flaws* expand upon those chapters in the *Player's Handbook* with tips to help you know what to do when a particular skill, perk, or flaw comes into play.

Chapter 6: Supporting Cast covers how to populate your campaign setting by creating all the characters—ranging from the smallest "bit players" to the most formidable archvillains—that your players' heroes will come into contact with during their adventures. To create a particular type of character quickly, you can use the supporting character templates provided at the end of this chapter.

Chapter 7: Attributes goes into detail about the relationships that can exist between heroes and other characters in a campaign setting. What can contacts and allegiances do for a hero, and how does a character's social status affect his ability to succeed in dealings with the world around him? Answers to these questions and more are in this chapter.

Chapter 8: Achievements talks about ways you can control the pace at which heroes advance in power as your campaign runs its course, and gives advice on what you can do when your heroes have become so powerful that it's difficult to come up with new ways to challenge them.

Chapter 9: Running the Game discusses the basics of how to prepare for and how to moderate a game session. You'll learn about techniques you can use to make the roleplaying game experience exciting and fulfilling for your players as well as for yourself.

Chapter 10: Vehicles is another "expansion" chapter, building on what the *Player's Handbook* has to say about using vehicles and running scenes that involve combat between vehicles. You'll read about special equipment that you can make available to your heroes so they can add armor, weapons, and other gear to the basic vehicle types described in the *Player's Handbook*.

Chapter 11: Spaceships is a complete set of rules for designing different spacecraft. In a science fiction setting, it's likely that there are as many different kinds of spaceships as there are different kinds of automobiles in our real world. The information here will enable you and your players to create any type of spacegoing vessel you can imagine.

Chapter 12: Alien Artifacts adds an element of mystery to your game. If you use this rule system, your heroes will be able to acquire strange pieces of technology that provide them with awesome powers, while at

the same time saddling them with disadvantages or hindrances that serve as a trade-off for an artifact's wonderful benefits.

Chapter 13: Campaign Design is the start of a section of this book devoted to helping you create your own imaginary universe. You'll start by making some basic decisions about what type of science fiction setting you want to develop, and what the "ground rules" of that setting are.

Chapter 14: Campaign Architecture is the next step on the path, where you'll use charts and tables to design the stars and planets of your campaign setting as well as the individual nations and civilizations that exist on each world.

Chapter 15: Adventure Design adds the final level of detail to your campaign setting. You'll learn about the essential elements that any good adventure must contain, and how to put those elements together in a number of different ways to fashion situations and stories that will challenge and entertain your players.

Chapter 16: Optional Rules is partly an extension of Chapters 13, 14, and 15 in the *Player's Handbook*, offering tips on how to handle psionics, mutants, and cybernetics in your game. It also goes on to introduce an entirely new set of optional rules—FX (short for "special effects"). If you want to play in a fantastic science fiction universe where characters have magical or superheroic abilities, the FX system is for you.

Chapter 17: Creatures & Aliens rounds out the features of your science fiction setting by giving you game statistics for nearly three dozen different types of normal and not-so-normal animals.

Finally, for the benefit of those of you who are also players of the *ADVANCED DUNGEONS & DRAGONS®* game, we've provided a short appendix with rules for converting AD&D® characters into *ALTERNITY* heroes.

Tables and Sidebars

In addition to regular text, this book includes two other types of information: tables and sidebars.

Tables, most of which are made up primarily of numbers, provide a lot of statistics in an easy-to-find format. A few of the tables in this book (the ones with a "P" in front of the



"Pleasure doing business with you!"

table number instead of a "G") also appear in the *Player's Handbook*. They're reprinted here because you're likely to want to refer to them during play.

A sidebar is a piece of text printed on a blue background, separate from the regular text that runs continuously throughout each chapter. Some information in sidebars is associated with aspects of the rules that pop up in more than one place. Some sidebars present facts that aren't critical to the rules, but which we think you'll be interested in anyway. Sidebars are also used to make information easier to spot, so you don't have to scan through regular text to find it. The sidebar in this introduction is an example of this last type.

FINAL WORDS

A bit of advice: for the game to work, players and Gamemasters need to remember one thing—what the Gamemaster says goes. Sometimes you're going to have to interpret a rule or situation that just isn't covered in the books. That's when you have to make a decision. Try to be

fair and consistent, but the goal is to get on with the game quickly. Explain your decision, don't argue, and keep the action going. Later, you can discuss the ruling and possibly talk about making minor modifications if you think it's warranted. But in the middle of the game, rule in favor of fast, exciting, and story, story, story!

Remember, a roleplaying game isn't about using every rule exactly as it's written. It's about having fun. Use what you like in the rules, make up new ones if you want, but above all, apply the Rules of Common Sense and Story to your game. If something makes sense to you, then just declare that from now on that's the way it works in your game. And if something ought to happen for the story or adventure to advance, don't let the rules dictate against your judgment. Take what's presented here, adapt it, make it work for your group and your playing style, and just have fun! That's what roleplaying is all about.

If you're ready to start, turn the page and begin with the Fast-Play rules!



CHAPTER 1

FAST-PLAY RULES

This chapter is a companion to *Chapter 1: Fast-Play Rules* in the *Player's Handbook*.

The information here is directed to the Gamemaster, and particularly to people who are trying a roleplaying game for the first time. However, even if you have experience in running roleplaying games, it's a good idea to read this chapter to give yourself a clear idea of how the *ALTERNITY*® game works and how it differs from other roleplaying game rules you may be familiar with.

SO YOU WANT TO BE THE GAMEMASTER?

This chapter of the *Gamemaster Guide* provides an overview of the Gamemaster's role in an *ALTERNITY*® game. It contains a short adventure that you can use to introduce your players to the game and familiarize yourself with moderating a roleplaying session.

What does a Gamemaster do? Basically, he presents adventures for the players to run their heroes through, and acts as the moderator of the rules. In this chapter, you'll find an introduction to the *ALTERNITY* game that can get you off to a good start for your first game session.

The Role of the Gamemaster

As the Gamemaster, you have a number of jobs to handle during and between game sessions. Unlike other types of games that have strict rules and deal with limited situations, a roleplaying game such as the *ALTERNITY* game is as wide open as the players' imaginations. For this reason, the presence of a game moderator to act as referee, story designer, and narrator is essential.

The players interact with each other and the game environment through the actions of their characters, the heroes. The Gamemaster describes each scene, directs the action, and plays the roles of the supporting cast members—villains,

allies, and extras who inhabit the campaign world.

However, the Gamemaster isn't competing against the players. When the Gamemaster and the players get together to tell a fun and exciting group story, everybody wins. That's the power and appeal of roleplaying.

KEY CONCEPTS

Let's take a look at some of the key concepts behind moderating the *ALTERNITY* game.

► **Gamemaster:** The participant in the game who acts as the moderator, narrating adventures and controlling characters who are involved in the story but aren't under the direct control of the players.

► **Hero:** An imaginary character controlled by a player.

► **Supporting Cast:** The other characters who appear in every story: friends, enemies, and incidental characters whom the heroes interact with. Members of the supporting cast are controlled by the Gamemaster.

► **Setting:** The imaginary context and environment within which the heroes interact with situations.

► **Adventure:** A scenario in which the heroes interact to create a group story. As Gamemaster, you present an opening situation or scene (called the "trigger"). The rest of the adventure unfolds through the actions of the heroes (as dictated by their players) and the moderation of the Gamemaster (through story events and the supporting cast).

► **Campaign:** A continuing series

of adventures that takes place in a single setting and focuses on the same group of heroes. A campaign can be finite, ending after as many adventures as necessary to tell the complete story; or it can be an ongoing tale, progressing like a television or comic book series.

► **Group Story:** While a regular story, such as found in a movie or a book, features a set beginning, middle, and ending, a group story is more dynamic. The Gamemaster has an outline that provides a series of encounters and events, and a few possible ways the adventure could end. The dynamic comes from the group—the players and Gamemaster—who determine the course of the story and its outcome through the interaction of their imaginary characters. In a group story, no one—not even the Gamemaster—knows exactly how it all will end.

► **Game Session:** One distinct period of game play; a time when you gather your friends to play the *ALTERNITY* game. Some adventures can be completed in a single session; others might require several sessions to reach a conclusion.

Just for Starters

Even if you have experience with other roleplaying games, we encourage you to read through the rules in this chapter and get a feel for the *ALTERNITY* game system before moving on to the next chapter.

PRESENTING AN ADVENTURE

A roleplaying game's action takes place in an adventure. Within its structure, the participants create the group story. The Gamemaster's role in the adventure centers around presenting and narrating the story, portraying supporting cast members, and moving the story along at a satisfying pace. Whether you use published adventures (such as *Cauldron Station*, presented at the end of this chapter) or you create your own epics, the Gamemaster's role remains the same.

Narration

The heroes can't perform heroic actions or daring deeds in a vacuum. They need to be involved in a story during which they act, react, and create a fulfilling tale. A story consists of a beginning, a middle, and an end, and each story should be filled with conflicts and goals—in other words, obstacles for the heroes to overcome and objectives for them to achieve. It's up to the Gamemaster to have the basics of a story ready when the game session gets under way.

Remember, though, that the story will be completed by the group—through the actions of the heroes and their interaction with your supporting cast. The heroes play an important part in determining how a story takes shape, and you should make sure their decisions play a part in the process.

You must develop a basic plot (or use a plot from a published product), provide motivations and objectives for the heroes, and have an exciting idea for the ending. A plot requires enough background material so that the story feels like it fits the campaign setting. Other elements that make a good basic plot include a major antagonist (the villain), the antagonist's nefarious scheme, and motivations to make the heroes want to get involved. These elements come together in the adventure's opening scene—called the trigger.

The *Cauldron Station* adventure provides an example of how these elements work together.

Supporting Cast

Each of the players controls one hero at any given time. The Gamemaster controls all other characters in the adventure. The most important supporting cast member is the major antagonist. A good villain sets the mood of a story and can even make the heroes more memorable—no one recalls who rounded up the spaceport thugs, but everyone remembers the heroes who took down Captain Blackstar, the scourge of the Frontier!

Supporting cast members include the major villain; his or her associates and hired hands; the authority figures who command or employ the heroes; the informants, witnesses, and shop owners the heroes interact with; and the valued friends, hirelings, and allies ready to help the heroes at a moment's notice. The Gamemaster needs to be ready to run these characters as they are called upon, or to improvise as the need arises.

It's important for the Gamemaster to give each supporting cast member—especially major opponents and allies—much the same consideration players give their heroes when they create them.

Some supporting cast members should be fully developed, with a complete set of skills and vital game statistics. Other characters, such as minor opponents, experts, and bystanders, need only the skill scores and statistics that might come into play during a scene. For example, give a common thug a combat skill or two, durability ratings, and a weapon; give an expert just the skill scores needed to use his expertise on the heroes' behalf.

The best part about controlling the supporting cast is that you get to create all kinds of personalities during the course of play. Ham it up, play it straight, or go for the dramatic—depending on the mood of the adventure and the personality of the character in question.

If you want, use a unique voice for each character by doing accents (a French Combat Spec, a Russian Diplomat), employing different styles of speech (a formal-sounding Free Agent, a Tech Op who uses lots of slang expressions), or giving characters signature phrases (such as an informant who always spouts, "Whatever you say, Boss, whatever you say").

Remember, you're not competing

against the players! If anything, the heroes should get a break now and then just because they're heroes. So, be impartial—don't favor the supporting cast over the heroes. That just decreases the all-important fun factor for everyone involved.

Pacing

Another aspect of presenting an adventure is the pacing of the story. The story shouldn't artificially push the heroes to meet some schedule. Instead, watch how the scenes play out. When a scene starts to drag and the fun factor begins to flag, that's when you step in to give the scene a boost. How? By using the resources at your disposal—maybe have a supporting character show up with some tip that gives the heroes a nudge in the right direction. If your players don't know what to do next and the story is in danger of stalling, it's up to you to give it new life.

Don't create an adventure outline that's so complete the heroes can't make any decisions without violating your plot. Start the adventure with action, and have lots of other action ideas ready to insert into the flow as the game session progresses. Use combat, challenges, encounters, conflict, tension, humor, and mystery to keep an adventure moving toward its dramatic conclusion.

The basic rule for pacing is that as long as the players are having fun, stay in the current scene. When the action bogs down, then the Gamemaster must help the pacing by getting things moving again.

Moderating the Rules

Chapter 1 of the *Player's Handbook* gives you the basic facts about how the *ALTERNITY* game works. That's all you need to introduce your players to the game system and run the adventure in this section. In play, it's up to the Gamemaster to moderate the game so that everyone has fun, plays fair, and is challenged. Of all these, the emphasis is always on fun. If a rule gets in the way of everyone's enjoyment, change it. But change it consistently and after consideration. Don't just change a rule for the sake of change.

Final decisions are always left to the Gamemaster. Can the heroes perform a particular action? Can

they even try it? That's up to you. Make your decision based on the need to keep the story moving, your interpretation of the rules, and whether or not the action fits the story and increases everyone's enjoyment of the game. Be fair and impartial in your treatment of heroes and supporting characters. Challenge the players and their heroes. The players want to see their heroes tested, to experience the thrill of competing against the odds and coming out on top. Heroes do this sort of thing all the time! Just make sure the players have decisions to make and options to choose from as the adventure unfolds.

If someone disagrees with a decision, call a time out and discuss it with the group. You still get to make the final call, but you can reduce the possibility of hard feelings if you moderate the game fairly. The goal is to tell a good group story and to have fun, not to abuse the heroes.

Sometimes the dice are just going to fall the wrong way. That's okay. But you might want to give the players a break now and then. After all, it's no fun for a player to lose a hero in a stupid and random way. Be lenient when determining the difficulty of a particular action, or change the result before revealing the outcome to the players. This sort of manipulation is the Gamemaster's prerogative, but use it sparingly—and always in the interest of keeping the story moving and the fun factor high.

THE SETTING

The Gamemaster determines the setting for his campaign. Depending on the features of a particular setting (such as technology, genre, and scope), certain portions of the rules—high-tech gear, psionics, and aliens, for instance—may or may not be used. For example, a space-opera setting usually has faster-than-light spaceships, energy weapons, and tons of nonstop action. A near-future technothriller setting, however, has a gritty, hard-edged feel, more familiar technology, and only deals with the problems of a single world.

In the *Gamemaster Guide*, the process of creating settings is discussed in more detail. The *Cauldron Station* adventure in this chapter takes place in a traditional space opera setting.

Examples of Situation Modifiers

Weapon Range	Short	Medium	Long
Pistol	-1 step	+1 step	+3 steps
Rifle	-1 step	None	+1 step
Target Has Cover			
Light cover		+1 step penalty	
Medium cover		+2 step penalty	
Heavy cover		+3 step penalty	
Situation			
Extreme difficulty	+3 steps	Amazing ease	-3 steps
Moderate difficulty	+2 steps	Good ease	-2 steps
Slight difficulty	+1 step	Ordinary ease	-1 step
Marginal difficulty	None	Marginal ease	None

USING THE GAME MECHANIC

The *ALTERNITY* game is built around a core mechanic that has nearly universal application. All heroic actions in the game can be resolved by rolling just two dice: a control die and a situation die. A control die is always a d20; a situation die can be a d4, d6, d8, d12, or d20. Depending on how hard or easy a particular task is, the result of the situation die is added to or subtracted from the result of the control die, as detailed in the *Chapter 1: Fast-Play Rules* in the *Player's Handbook*.

You can use the dice in varying ways, though the mechanic is always the same: Roll two dice, trying to achieve a number that's equal to or less than a character's appropriate score. If the task is associated with a skill, then the skill score is used. If it's a feat, then the associated Ability Score is used. In all uses of dice during a game session—except when rolling for damage—low results are better than high ones.

Use the mechanic to determine the success of an attack, using an appropriate combat skill; to overcome a challenge, using a physical or men-

tal skill; or to determine the outcome of an encounter, using a Personality skill in conjunction with good role-playing.

The Most Important Rule

Not every action requires a dice roll. Repeat this sentence and apply it often. When the heroes attempt normal, everyday tasks, they should accomplish them without consulting the dice. In heroic situations, when the outcome is in doubt and the result could mean life or death, then have the players roll dice.

Situation Die Steps

The best tool you have as the Gamemaster is your ability to set the odds of any given task. You can do this by adding bonuses or penalties for given situations and counting in the appropriate direction on the Situation Die Steps Scale (presented in Chapter 1 in the *Player's Handbook*). Or, if you're more inclined toward quick resolutions, simply eyeball it; select the modifier that matches how difficult or easy you want the task to be.

Eyeballing It

Situation Description	Modifier	Situation Die
Extremely easy	-3 steps	-d8
Very easy	-2 steps	-d6
Easy	-1 step	-d4
Average	None	+d0
Tough	+1 step	+d4
Hard	+2 steps	+d6
Challenging	+3 steps	+d8

Putting It Into Practice

What do you actually do with this information? That depends. Here are examples of both methods in action. Use either method or a combination of the two, as you see fit.

► **The Step-by-step Method:** Michele's hero, Jade, wants to take a shot at the villainous bounty hunter. Jade has the *pistol* skill, so she has a base situation die of +d0. The bounty hunter is 25 meters away from Jade, which is medium range (+1 step penalty) for her weapon, and has light cover (+1 step penalty). In addition, because Jade is standing atop a moving skycar, you declare that the situation has a Good level of difficulty (+2 steps). By counting out the steps on the Situation Die Steps Scale, the Gamemaster determines that Jade has a final situation die of +d12. Michele rolls d20+d12, hoping to achieve a total that's equal to or less than Jade's pistol score. If she succeeds, then Jade hits her target, scoring either an Ordinary, Good, or Amazing success.

► **Eyeballing It:** Dave's hero, Jack Everstar, needs to slip past the customs official. Since Everstar doesn't have the *sneak* specialty skill, his base situation die is +d4. You decide that the official is particularly vigilant today. This makes the situation Hard, causing Everstar to take a +2 step penalty. Dave rolls d20+d8, hoping for a result equal to or less than Everstar's Stealth skill score.

Action Rounds

Although actions in a phase are considered to occur simultaneously, you don't want everyone rolling dice at the same time. Instead, all characters who are entitled to an action in the same phase should act in the order of their action check scores—highest score first. The results of their actions (such as damage) are applied at the end of the phase, thus simulating simultaneous activity.

◆ **Example:** Jade, Everstar, and the bounty hunter Kreet each achieve a Good action check result. Their action check scores are 13, 10, and 15, respectively. For ease of play, Kreet acts first in the Good phase, followed by Jade, then Everstar. The results of each character's action are applied after everyone has acted, taking effect in the Ordinary phase. If the

characters have actions remaining, they go in the same order in the Ordinary phase.

Damage

In the fast-play rules system, damage comes in three types: stun, wound, and mortal. If a character is hit by an attack or some other damage-causing condition, the degree of success achieved by that attack determines the type and amount of damage suffered by a character.

Each of the character templates at the end of the Chapter 1 of the *Player's Handbook* lists some examples of weapons and armor, and includes their important statistics.

◆ **Example:** Kreet fires his 11mm charge pistol at Jade. He achieves a Good success against Jade. The damage range for a Good success with that weapon is d6+2w. Since Kreet is a member of the supporting cast, you (as the Gamemaster) roll to see how much damage Kreet inflicts. The most he can do is 8 points of wound damage on a roll of 6.

Secondary Damage

Serious, lasting injuries—mortal damage and wound damage—cause secondary damage to the character who is injured. For every 2 points of wound damage inflicted on a character, that character also suffers 1 point of stun damage. For every 2 points of mortal damage a character receives, that character also suffers 1 point of wound damage and 1 point of stun damage.

◆ **Example:** Jade returns fire with her 11mm charge rifle and gets an Amazing success against Kreet. The damage range for an Amazing success with her weapon is d6+1m. Jade's player, Michele, rolls d6 and gets a result of 4. Kreet suffers 5 points of mortal damage (4 + 1 = 5) plus secondary damage of 2 wounds and 2 stuns.

Armor

Characters can wear armor to protect them from the dangers of battle. Armor can reduce the primary damage a hero suffers—but armor has no effect on secondary damage.

◆ **Example:** Jade is wearing a CF long coat when Kreet hits Jade for 8 wounds. That amount of damage causes 4 points of secondary stun damage, which Michele records on Jade's character template immedi-

ately because armor doesn't stop secondary damage. Now Michele rolls to see how well Jade's armor protected her hero from the wound damage. The CF coat blocks d4+1 points of high impact (HI) damage. Michele rolls d4 and gets a result of 3, for a total of 4 (3 + 1), so the number of wounds is reduced by 4. Michele marks off 4 wound boxes on Jade's character template (8 - 4 = 4).

Recovery

After a character suffers damage, he or she can get back to full health in a number of different ways:

► Wound damage, but not mortal damage, can heal naturally at a rate of 2 wound points per week of rest and recuperation.

► The Knowledge-*first aid* specialty skill can heal stun damage on conscious patients, negating 2, 3, or 4 points of stun damage depending on the degree of success achieved on the skill check (Ordinary, Good, or Amazing).

First aid can also be used to revive a character who was knocked out due to stun damage, restoring 1, 2, or 3 stun points depending on the degree of success.

This skill can be used to heal wound damage; any success restores 1 wound point.

► The Medical Science-*treatment* specialty skill can be used to heal stun damage on conscious patients, as per *first aid* above.

Medical Science-*treatment* can also be used to revive a character who was knocked out due to stun damage, restoring 2, 3, or 4 stun points depending on the degree of success.

This skill can be used to heal wound damage; any success restores 2 wound points.

► The Medical Science-*surgery* specialty skill can be used to heal wound damage and mortal damage; a success restores 1 point of mortal and 2 points of wound damage. This skill can be used on a specific patient once every hour. If a Critical Failure occurs, the patient suffers 1 additional point of mortal damage.

► Any remaining stun damage disappears at the end of a scene.

CAULDRON STATION

An Introductory ALTERNITY Adventure

This adventure uses the fast-play rules to introduce Gamemasters and players to the ALTERNITY game. Only the Gamemaster should read this adventure before play begins. If players read the adventure before their heroes get to participate in it, they'll ruin the fun of being surprised and spoil the group storytelling experience for everyone.

As the Gamemaster, it's your job to read through this adventure and become familiar with the basic plot and mood of the story. When you're ready, let the players choose heroes from those in *Chapter 1: Fast-Play Rules* or create their own heroes using the complete rules in *Chapter 2* in the *Player's Handbook*. Encourage the players to assemble a balanced group of heroes, with at least one representative from each of the professions. The heroes will need brains, brawn, and negotiating skills to survive the challenges of *Cauldron Station*.

Background

This adventure takes place in a far-future, space-opera setting. The heroes have access to a number of high-tech tools that don't exist in the current day and age. In addition, the tone is heroic, larger than life, and fits in neatly with your favorite science fiction film epic.

Cauldron Station is a mining outpost on the isolated planet known as Cauldron. The name fits the world very well. Cauldron is literally a hellish place, as it orbits exceedingly close to its star and has a high volume of volcanic activity. Even in the relative coolness of a giant canyon, Cauldron Station endures temperatures of 500° C during the heat of the day. Through the wonders of far-future technology, the mining outpost protects its workers from the deadly environment, allowing them to reap the profits their processed ores bring on the open market.

The station is a self-sustaining, totally enclosed system that holds a comfortable environment within its insulated walls and pressure domes. It keeps the heat and toxic atmosphere out, using the same technolo-

gy that allows this future civilization to explore and travel the star lanes. Even the mines are protected so that the workers can labor safely; the mine shafts are drilled beneath the protection of great pressure domes.

The heroes come to Cauldron in their trader-class starship, the *Nebula Bounty*, for business purposes. They have a shipment of 3D computer programs to sell to the outpost, including entertainment programs, news and technical journals, and the latest Grid interactives to cheer up the recreation-starved miners. In addition, they plan to fill their cargo holds with processed ore. The construction projects going on in other nearby star systems are in desperate need of quality ore—and they're willing to pay extremely well for it.

Unfortunately, a few events combine to make this particular mission a lot more hazardous than usual.

► First, the region of Cauldron housing the outpost is experiencing a powerful magnetic storm. Communications into and out of the base have been disrupted by the magnetic activity, so the heroes must make their approach without any help from the outpost traffic beacons.

► Second, the storm plays havoc with the ship's sensors, so the vessel passes through a spume of molten molybdenum expelled by one of the planet's many active volcanoes. This superheated liquid metal clogs the ship's tachyon intakes. While this doesn't hinder the ship's normal performance, it does make it impossible for the vessel to starfall—to travel at faster-than-light speed.

► Third, the outpost has its own problem. Two creatures native to Cauldron's environs have invaded the outpost, knocking out power and killing a significant number of miners. Because of the disruption in communications, the heroes don't know about this problem ahead of time. They'll discover it as they explore the station.

Recent Events

What's been happening within Cauldron Station? The miners extended a shaft that opened into a lava flow

deep beneath the planet surface. This shaft provided access to the outpost for a pair of deadly native creatures that the miners have dubbed "moltenoids." The moltenoids invaded the mining dome four days ago. Twelve miners were killed before the survivors managed to contain the creatures within the mining dome by sealing the airlock doors leading to the dome.

The creatures killed not out of maliciousness, to acquire food, or to protect themselves, but just as a byproduct of their alien physiology (see "The Supporting Cast" on page 15 of this chapter). The miners theorized that, since these creatures live in extremely hot conditions, lowering the temperature inside the mining dome would drive the beasts back into the shaft, which could then be sealed.

Instead of returning to the shaft, however, the beasts created a different exit. The moltenoids melted a path through an emergency closet and into the conduit vents within the station's insulated walls. From these conduits, the creatures gained almost total access to the outpost.

More deaths and many injuries followed. The station administrator and the security officer eventually decided to seal off this wing of the outpost from the rest of the station. That was two days ago. About a day later, one of the creatures reached the power reactor and shorted out most of the station. Now, with total life support collapse set to occur in six hours, the station is on the verge of death—as are all the miners and station personnel trapped within.

Adventure Outline

Cauldron Station presents three obstacles that the heroes must overcome: the damage to their ship, the station's power outage, and the invading creatures. The action is broken down into an opening trigger and three scenes, as well as additional events based on the map (see page 17 of this chapter) that can be used or ignored as you see fit.

► **Trigger:** The adventure begins after the heroes land on Cauldron and enter the airlock that leads into the station. Three guards, led by station security officer Birrden, set an ambush for the heroes. They see the heroes as unknown invaders, perhaps pirates or smugglers seeking to profit during the station's current crisis. The opening scene of the adventure definitely has the potential to become a combat scene, although the heroes can negotiate with Birrden if they are so inclined (turning it into an encounter scene).

► **Encounter Scene:** Station Administrator Crowell has gathered the other survivors in the ore storage bay. With the temperature rising and the air getting less breathable with every passing hour, Crowell and his lot are getting closer and closer to panic. They have no surviving technicians, no one with any hope of repairing the life support system. They do have something the moltenoids want, however, which the heroes can use in various ways if they are so inclined. The problem is, Crowell and his band refuse to open the storage bay airlock. The heroes will have to enter by force or—the preferred method—negotiate until Crowell is talked back to his senses.

► **Combat Scene:** Two moltenoids are loose in the facility. No matter how friendly the heroes might want to be, the only viable way to deal with these creatures is either to destroy them or otherwise render them helpless so they can be removed from the station without further harm befalling the miners. One of the creatures must be forcibly removed from the lair it has established in the engineering center before power can be restored to the station. The other creature roams through the wing, inflicting damage simply due to the heat of its passage. The heroes might decide to hunt the beast or set traps for it (possibly using the material provided by Crowell from the ore bay).

► **Challenge Scene:** It is critically important to get the life support system back on line. To do this, the heroes must remove the resident moltenoid from the engineering center, repair the damaged power generator, and enter the conduits beneath the station to reinitialize the life support system. This requires a combination of technical skills and

hands-on labor—while possibly keeping one or more of the creatures at bay.

The Supporting Cast

The facing page contains essential information about the four types of supporting cast members that play a part in this adventure: two unique characters, Birrden and Crowell; the group of surviving miners, all considered identical for the sake of simplicity; and the two moltenoids that have entered the station, both described with a single set of statistics. These characters are controlled and portrayed by the Gamemaster. Feel free to expand upon their motivations and behavior as dictated by the way the adventure unfolds.

The numbers in brackets following some of a character's Ability Scores represent resistance modifiers. In the list of skills each character possesses, the number in brackets following a skill name is the character's skill score—the dice result needed to get an Ordinary success. If a character has a specialty skill, that skill name and the skill score associated with it are printed in *italic type* immediately after the broad skill to which the specialty skill is related.

The Station

Important locations within this wing of Cauldron Station are depicted in the map on page 17. Refer to that map as you read the following information, so you can familiarize yourself with the environment. Don't show the map to your players, unless they succeed in obtaining it by using one of the station's computers (see the text in the next column concerning area 4).

Cauldron Station is in bad shape. Since the power cut out, the temperature has risen to 39°C (102°F) and the air has grown stale. In six hours, the interior will heat to deadly temperatures and the atmosphere will turn toxic. If the power is restored before the six hours expire, the station can be saved. Until then, emergency lights barely illuminate the facility and the heat grows steadily worse.

Because of the poor environmental conditions, every hour characters must make a successful Stamina--endurance skill check to fend off

damage. If a character fails the check or a Critical Failure occurs, he suffers 1 or 2 points of stun damage, respectively. Wearing an e-suit (see below) eliminates the need for such checks.

Airlocks must be opened manually, but no airlock can be opened if another airlock connected to the same area is already open. The airlocks to areas 7, 8, and 9 have been sealed. These seals can be removed with the proper tools and an hour of work. (Area 8 is the only one of these places that the characters should want to gain access to, and there's another easier way to get in; see the description below.)

Conduits containing wiring, vents, and other machinery run beneath the floors of the station and inside the insulated walls. The moltenoids use these conduits to travel throughout the wing shown on the map. Note that no conduits run beneath the mining dome (area 9) or the storage bay (area 8). Only the insulated wall provides secret access to these areas. Characters can enter the conduits, but they can't travel through them as easily as the moltenoids can.

Most computer stations in the facility are inoperative due to the power outage. Only computers in the operations center (area 4) and the engineering center (area 6) can be used, thanks to emergency power supplies in these rooms. Birrden, Crowell, or an operating computer can tell the heroes about the state of the facility and the impending time limit.

► **Area 1:** This access tunnel leads from the landing pads, where the heroes have docked their starship. A transport carries them from the pads to the airlock, which must be opened manually.

► **Area 2:** These four airlock chambers protect the wing from possible environment breaches.

► **Area 3:** This transport tunnel allows the vehicles to service the storage bay, the mining dome, and the landing pads.

► **Area 4:** Base operations serves as the command center of the station. Using the Knowledge--computer operation skill, heroes can learn the current condition of the station (Ordinary success), call up the schematics for repairing the power generator and reinitializing the life support system (Good success), or access de-

The Supporting Cast

Security Chief Birrden

Profession: Combat Spec

STR	13	[+2]	INT	8	[0]
DEX	9	[0]	WIL	8	[0]
CON	10		PER	6	

Durability (s/w/m): 10/10/5 Action check: 9+/8/4/2
Actions per round: 2

Attacks

Brawl	15/7/3	d4+2s/d4+3s/d4+4s	LI
Pistol	11/5/2	d6+2s/d8+2s/d8+4s	LI

Defenses

Battle vest	d6-3 (LI), d6-2 (HI), d4-2 (En)
Dodge	Successful skill check (10 or less) increases DEX or STR resistance modifier vs. next attack by +1/+2/+3.

Skills

Athletics [13]; Unarmed Attack—brawl [15]; Acrobatics [9]—dodge [10]; Modern Ranged Weapons [9]—pistol [11]; Vehicle Operation [9]; Stamina [10]; Knowledge [8]—computer [9]; first aid [9]; Awareness [8]—perception [10]; Interaction [8].

Gear: Security card (opens all doors except the closet in area 6 and the airlocks leading into areas 7, 8, and 9), stutter pistol (range 6/12/30 meters), battle vest, comm gear (communication device).

Birrden takes her role as security chief seriously. The current crisis makes her think that she has failed those who placed their trust in her. Still, she will work to protect the station and its inhabitants. After her initial confusion, she will see the heroes as the best hope the station has—and will do everything she can to make sure they use their skills to save the station.

Administrator Crowell

Profession: Diplomat

STR	8	[0]	INT	10	[0]
DEX	10	[0]	WIL	11	[+1]
CON	6		PER	13	

Durability (s/w/m): 6/6/3 Action check: 11+/10/5/2
Actions per round: 2

Attacks

Unarmed	8/4/2	d4s/d4+1s/d4+2s	LI
Pistol	11/5/2	d4+2w/d6+2w/d4+1m	HI

Defenses

CF long coat	d4 (LI), d4 (HI), d6-2 (En)
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Skills

Athletics [8]; Unarmed Attack [8]; Modern Ranged Weapons [10]—pistol [11]; Vehicle Operation [10]; Stamina [6]; Knowledge [10]—computer [11]; System Operation [10]; Administration [11]—bureaucracy [13]; Awareness [11]—perception [13]; Interaction [13]—bargain [15]; Leadership [13].

Gear: Security card (opens all doors except the airlocks to areas 7, 8, and 9), 11mm charge pistol (range 10/20/80 meters), CF long coat, comm gear.

Crowell is a good administrator who got greedy. Now his greed could result in the death of the station and its inhabitants. He's a panicky man who isn't thinking clearly. It takes a strong will and a solid argument to get through his fear to reach the good leader beneath. Once that's done, he'll go along with the heroes—if he's shown that his actions will save the miners under his command.

Miners

Nonprofessional laborers

STR	9	[0]	INT	9	[0]
DEX	8	[0]	WIL	7	[0]
CON	8		PER	7	

Durability (s/w/m): 8/8/4 Action check: 9+/8/4/2
Actions per round: 2

Attacks

Brawl	10/5/2	d4s/d4+1s/d4+2s	LI
Tool	11/5/2	d4+1s/d4w/d4+1w	LI

Skills

Athletics [9]—climb [10]; Melee Weapons [9]—bludgeon [11]; Unarmed Attack [9]—brawl [10]; Vehicle Operation [8]; Stamina [8]—endurance [9]; Knowledge [9]; System Operation [9]; Awareness [7]; Interaction [7].

Equipment: Mining gear, universal tool (can be used as a club), comm gear (communication device).

Every miner has an individual outlook, but in general they're fearful and certain that death is near. All of them are loyal to Crowell. Some still trust Birrden, but many blame her for the current situation.

Moltenoids

STR	15	[+3]	INT	6	[-1]
DEX	11	[+1]	WIL	6	[-1]
CON	16		PER	4	

Durability (s/w/m): 16/16/8 Action check: 13+/12/6/3
Actions per round: 2

Attacks

Heat	see text		
Claws	17/8/4	d4+2w/d6+2w/d4m	LI

Defenses

Metallic hide	d6 (LI), d6-1 (HI), d4-2 (En)
Dodge	Successful skill check (13 or less) increases DEX or STR resistance modifier vs. next attack by +1/+2/+3.

Skills

Acrobatics [11]—dodge [13]; Stealth [11]—sneak [12]; Stamina [16]; Awareness [6]—perception [9].

Moltenoids are four-legged creatures with smooth, metallic hides. Their bodies are roughly cylindrical, a little less than a meter in diameter. The creatures are only able to move at a speed slightly faster than a human's walking pace. Two of them have entered the station accidentally, and most of the damage they've caused is due to their physiology—which is deadly to humans. One occupies the engineering center and protects it from intruders. The other one wants to reach the ore storage bay to get what Crowell is jealously guarding: cartons holding a liquid metal that he calls fire gold. Crowell sees profit when he looks at the material, but the moltenoids need the stuff to survive. They aren't hungry enough to blindly attack, but they will be soon.

Anyone within 2 meters of a moltenoid could suffer energy damage from the intense heat that emanates from the creature. Whenever a character is within range of a moltenoid, the character must make a Stamina—endurance check to see how much damage he or she sustains. Critical Failure, d6+2w; Failure, d4+2w; Ordinary, d4+1w; Good, d6s; Amazing, no damage.

A moltenoid only uses its claws to protect itself, or when trying to reach a food source. Someone attacked with the claws also needs to check for heat damage.

tails about the mining operation, inventory, and a map of the station (Amazing success).

► **Area 5:** This medical center contains various medical supplies, including six trauma packs. Using a trauma pack provides a -2 bonus on any Knowledge-*first aid* skill check, or a -3 bonus on any Medical Science skill check for the purpose of healing damage. Each trauma pack can be used six times before its contents become depleted.

► **Area 6:** The engineering center contains the station's power generator, control computers, and access to the life support system located in the conduits beneath this room. One moltenoid has set up a lair in this area by melting a hole into the wall to the north of the power generator.

► **Area 7:** The airlock leading into this area has been sealed to protect the living quarters of the station from the creatures currently loose in the mining wing.

► **Area 8:** The ore storage bay contains both raw and processed ore. There are no conduits beneath the floor of this area. Crowell and six miners have commandeered this area, sealing the airlock and fending off frequent attacks by the moltenoids. Cartons of what Crowell calls "fire gold," mined from the same shaft the creatures emerged from, lure the moltenoids, since the material is food they need to survive. A melted hole in the insulated wall, to the south of the airlock, is the route the creatures use to reach the stored cartons.

► **Area 9:** The mining dome provides laborers with protection from the hostile environment. Shafts and mining equipment are located all around this area. The heroes should not be concerned with entering this area, unless they come up with a way to get the moltenoids back into the shaft they emerged from.

► **Emergency Closets:** Marked "E" on the map, each of these cabinets when fully equipped contains four e-suits, two trauma packs, and other emergency supplies. The closet within area 6 also contains components needed to repair the power generator. This closet can only be opened by using Crowell's security card. The contents of many of the closets may have already been used, at your discretion.

An e-suit protects its wearer from the adverse effects of the harsh envi-

ronment inside the station, providing an air supply and insulation from the heat. Characters wearing e-suits don't need to check for stun damage from the heat inside the station. If a character wearing an e-suit suffers wound or mortal damage from an attack, the suit loses its ability to protect its wearer from heat.

Trigger Scene

When the heroes enter area 2 on the east side of the map to begin the adventure, read the following to the players:

It's uncomfortably hot and the air has a stale smell to it even after the airlock cycles closed. Emergency lighting provides the only source of illumination. Four closets line the chamber, and a second airlock leads into the station. No one has arrived to greet you, and the place has an abandoned, dead feel to it.

Birdden and three miners who have been deputized into a security detail wait in ambush in two of the closets, one on each side of the chamber. They are wearing e-suits. Have the heroes make action checks to start the scene. They receive a +1 step penalty because of the ambush. Make one action check for the entire security detail, using Birdden's action check score.

Birdden thinks that the heroes are pirates or smugglers infiltrating the station. She has ordered the miners to help her subdue the invaders, using their clublike tools while she wields her stutter pistol. After a round of combat, the heroes can convince her to stop fighting—if they put down their weapons and surrender. Otherwise, Birdden fights until she is defeated. The miners surrender as soon as Birdden falls.

The trigger scene ends with the heroes defeating or teaming up with Birdden, or with them being captured by the security detail. If captured, they can later explain who they are and will then be recruited to help save the station.

Encounter Scene

Birdden eventually explains that Administrator Crowell and a handful of miners have barricaded themselves inside the ore storage bay. She'd like the heroes to talk to Crowell and get him to come out of hiding and help. They need his security card to open

the closet in area 6. This closet contains the components necessary to repair the power generator. Crowell also knows where components are stored that can be used to repair the heroes' ship.

If Birdden or any of her security detail aren't available to provide this information, the heroes will have to stumble upon the locked bay on their own. The airlock leading to area 6 shows signs of extreme damage—the alloy has been melted and scarred by what seem to be claw marks, but the material appears to have been too tough to get through. The wall to the north of the airlock is another matter. A passage has been melted into the insulated wall, and something very hot has apparently moved through the conduit. Melted wires, scorched pipes, and other signs of intense heat mark the walls of the passage.

The heroes can meet up with Crowell in one of three ways. If Birdden convinces them to seek out Crowell, she gives them the frequency of his comm gear. They can talk to him via the comm device. If not, they can try to get his attention by banging on the airlock, or they can use the conduit tunnel to enter the bay.

Crowell has an 11mm charge pistol that he isn't afraid to fire. He's used it against the creatures, and he'll use it on the heroes if they don't calm him down and earn his trust. He's paranoid, jealously protective of the fire gold, and unwilling to part with components to fix the heroes' ship.

The heroes can *bargain* with Crowell, or they can *bluff* him into assisting them. During negotiations, the heroes must accumulate six successes through their chosen form of interaction to win Crowell's trust. (Each time a character attempts a *bargain* or *bluff* skill check, an Ordinary result counts as one success, a Good result as two, and an Amazing result as three successes. If the character gets a Failure result, he must start over.) Combine dice rolls with roleplaying when running this scene.

Or, they can simply decide to overpower Crowell and his band. Each miner has a clublike tool to use in his or her defense. By the end of this scene, the heroes should accomplish the following things:

► Learn that the moltenoids are attracted to the fire gold. (A large



portion of the liquid metal is missing from a broken carton, because a moltenoid consumed it.)

- Obtain Crowell's security card that opens the closet in area 6.
- Secure Crowell's promise that spare parts will be supplied to repair their ship. (He won't turn these over until the station has been made safe.)

Combat Scene

The primary combat scene occurs in the engineering room (area 6), where one of the moltenoids has established a lair. The heroes can lure the creature into the open with fire gold; they can use fire gold to set a trap; or they can simply enter the chamber with weapons blazing.

The creature's lair is a burrow that has been melted into the thick insulated wall that surrounds the station's power generator. The intense heat has damaged components within the generator that must be replaced before power can be brought back on line. If the heroes don't lure the moltenoid out in some way, they'll have to enter the burrow to battle the creature. A short, meter-wide tunnel opens into a

2-by-4-meter chamber carved in the insulated wall to the north of the generator. The beast fights to defend itself and its lair, using its sharp claws and the heat of its body.

The second creature can be used to create suspense and build terror. It can emerge from the dark station corridors or arise from within the melted-out walls to hound, harry, and attack the heroes. Or, they can decide to hunt down the creature, dispensing with it before trying to restore power to the station. If neither of these events occurs, then the creature appears during the challenge scene—adding an element of combat for some of the heroes to deal with while the others work to fix the life support system.

Challenge Scene

In the end, this is the most important scene of the adventure. To save the miners (those still in this wing as well as those barricaded in the living section), the heroes must restore power and reinitialize the life support system. If they have obtained the parts stored in the closet in area 6, and managed to call up schematic

diagrams on one of the operational computers, the heroes can repair the generator. This requires the Technical Science skill. If a hero is using the *juryrig* specialty or just the broad skill, he or she must achieve eight successes. If the repair specialty is used, the number of successes needed is reduced to six. (See "Encounter Scene" above for how to count up accumulated successes.)

When the proper number of successes has been achieved, the air vents hiss and the lights come back on. The temperature begins to drop slowly. The station is saved!

Aftermath

In the length of time it has taken them to set things right at the station, the heroes have turned from intruders into celebrities. They are provided with all the parts they need to fix their ship, and they may go on their way soon thereafter.

Or, perhaps your group story still has tales to be told. If you and your players are having fun and you want to extend the adventure at Cauldron Station, keep on playing and see what happens!



CHAPTER 2

HERO CREATION

Players are one of the best resources you have for thinking up new adventures and great storylines for your campaign. If a player has poured thought, imagination, and personality into a hero, stories suggest themselves to both player and Gamemaster. Encourage your players to create living, breathing characters, and challenge them to play those characters with intelligence and resourcefulness. The more that a player has invested in his or her hero, the greater interest the player will exhibit in your game.

Working with your players as they build heroes requires a steady hand. If you force players to create characters they don't like, they'll walk away dissatisfied. On the other hand, you can't let players create heroes that destroy the balance of your campaign. Finding the balance between these extremes is an art. This chapter contains suggestions, rules, and advice to help you in this task.

ABILITY SCORES

Ability Scores play an important role; they form the basis for skill checks, and consequently combat power, persuasiveness, stealth, and overall usefulness. Players magnify this trend by selecting skills at which they know their heroes will excel, and by avoiding skills keyed to their heroes' lower Ability Scores.

What exactly do a hero's Ability Scores tell you about that character? In real life and in fiction, no one has a hero sheet. Instead, you judge people by the way they look, the way they act, and the ease or difficulty with which they deal with others. Ability Scores engineer your character from a set of game statistics into a three-dimensional hero that you can envision in your mind's eye.

Strength

Strength represents the capability for applying physical power. Some heroes with high Strength scores are muscle-bound titans. Others are wiry or compact in build, but possess the innate talent for getting the most out of the muscle they do possess.

Strength isn't just a measure of a character's bench-press; it's an abstract score that measures intangibles such as power, precision, flexibility, and a hint of physical confidence or determination. This is why skills such as Athletics, Heavy Weapons, and Melee Weapons are based on the hero's Strength score.

Strength is the prime Ability Score of the Combat Spec profession.

On Hero Creation

The *Player's Handbook* provides a simple, easy-to-follow process for creating heroes. Players choose a species, career, and profession for their individual heroes. Then they generate Ability Scores and select skills, perks, and flaws.

Find out what your players expect out of this game. Do they want to blast faceless aliens into subatomic particles? Then don't force them into a game in which they never get to use their weapons. If your players want to solve riddles and explore mysterious worlds, they'll quickly tire of a steady diet of bloodthirsty carnivores trying to chew them to pieces. The type of heroes that players create are an excellent indication of what they expect out of your campaign. See Chapter 13: *Campaign Design* for campaign ideas and advice.

Dexterity

Dexterity measures agility, reflexes, hand-eye coordination, balance, fleetness of foot, elusiveness, and physical intuition. Heroes with high Dexterity scores aren't necessarily acrobats or jugglers—many heroes excel in only one or two areas.

Meanwhile, clumsiness isn't an automatic trait for heroes with a low Dexterity. Such heroes or supporting cast members might just have a lousy sense of balance or a knack for landing badly. Similarly, they might

not have a good eye for shooting or for completing detailed work. On the other hand, a hero with a good Dexterity score tends to be graceful, quick, and agile.

Dexterity is a prime Ability Score of the Free Agent profession. It's also crucial to any character involved in a gunfight, because many of the most useful combat skills use a hero's Dexterity score. Even the most muscle-bound Combat Spec needs a decent Dexterity in order to target an enemy with a firearm.

Constitution

Constitution measures health, durability, toughness, and general grit. Like Dexterity, this physical attribute isn't easy to quantify. Try looking at a hero's Constitution score and asking these questions: How often does he get sick? How far could he jog before he'd have to stop and catch his breath? How easily does he shake off injuries? A character with a low score is weak in one of these areas.

You may find it hard to tell the difference between Strength and Constitution. Where does one Ability start and the other stop? Constitution refers to resistance to physical ordeals. How much punishment can he take before his body fails him? A hero or villain with a high Strength and a low Constitution may be out of shape, a heavy smoker, or lacking in the ability to push himself for the best results. The reverse describes a person without great physical gifts who makes an effort to keep himself in shape or manifests surprising resilience in the face of hardship.

Constitution is critical to any

character, whether a hero or supporting cast member, since it directly governs the amount of damage one can withstand; stun, wound, fatigue, and mortal ratings depend directly on the Constitution score.

Intelligence

Intelligence measures key mental characteristics such as raw reasoning power and breadth and extent of education. An unbiased IQ test, one that didn't assume any educational or cultural background, might measure reasoning power. Education is routinely measured through a variety of examinations.

Intelligence is a prime Ability Score for Tech Ops. However, it is useful for heroes of any career or type, since it governs the number of skills with which they begin play.

Will

Will represents mental fortitude, faith, strength of character, willpower, determination, discipline, and intuition. It measures how well a hero reads the character of others, and it demonstrates how attuned a hero is to his surroundings.

Will is the primary Ability Score of the optional Mindwalker profession.

Will also serves as the basis for a hero's Awareness skill, which allows him to detect threats, read character, and generally spot or avoid ugly surprises in the course of an adventure. If the optional psionic powers described under the Mindwalker profession are used, Will represents the first line of defense against mental influences and attacks.

Personality

Personality measures charisma, appearance, leadership, and magnetism. Physical beauty is only a small portion of a person's Personality score; although looks are important for initial impressions, the way in which a person expresses himself, listens to others, and interacts with society is far more influential.

Personality is the primary Ability Score for Diplomat heroes. Personality scores also determine how many last resort points a hero starts play with, and how many last resort points a hero can possess at any given time.

Ability Score Scale

If you're wondering just how unusual characters with scores of 4 or 14 really are, take a look at the chart below. It offers a mathematical overview of Ability Scores and might help you understand the implications of high or low Ability Scores.

Ability Score	Odds	You're in the Top
4	1 in 36 (3%)	100%
5	2 in 36 (6%)	97%
6	3 in 36 (8%)	91%
7	4 in 36 (11%)	83%
8	5 in 36 (14%)	72%
9	6 in 36 (16%)	58%
10	5 in 36 (14%)	42%
11	4 in 36 (11%)	28%
12	3 in 36 (8%)	17%
13	2 in 36 (6%)	9%
14	1 in 36 (3%)	3%

Odds refer to the chance of rolling that exact Ability Score using the 2d6+2 method. (See page 22.)

You're in the Top describes where a hero's score fits in the general demographics of the game universe. A hero with an Intelligence of 12 falls in the top 17% of the population.

The typical adult human character averages 9 in each Ability Score. This is a little less than the typical hero character, who averages 10 in each score. However, just like heroes, supporting characters possess strengths and weaknesses. For instance, a low-class thug needs Strength and Dexterity for winning fights, but doesn't need Intelligence or Will for performing technical or managerial work. Consequently, the thug's scores probably run something like this:

STR 11	DEX 10	CON 11
INT 7	WIL 7	PER 8

On the other hand, a supporting character who works as a research chemist requires very high mental scores. His Ability Scores may read:

STR 6	DEX 9	CON 6
INT 12	WIL 12	PER 9

Finally, not all characters are average; consider a young child such as a level-headed 8-year old. Generally, you won't need to know how tough the child is in a fight, but you might need to know whether or not

the kid can stay out of trouble when the villains attack. The child's stats might look like this:

STR 5	DEX 9	CON 5
INT 6	WIL 6	PER 7

Low mental stats don't necessarily indicate that the child is dumb; it just means that he doesn't have the education or experience of an adult. He might develop into an incredibly intelligent adult in a few years.

Age

As intelligent species mature and age, their physical and mental capabilities change. Older members of these species may slow down physically, but gain wisdom and life experience. If you run a long-lived campaign in which the heroes age and change with the passage of time, account for these changes by modifying the characters' Ability Scores. These modifications can't allow characters to exceed species minimums or maximums.

Adolescent:	-1 STR, +1 DEX, -1 INT, -1 WIL
Young Adult:	No modifications
Mature:	+1 INT, +1 PER
Middle-Aged:	-1 DEX, +1 INT, +1 WIL
Old:	-1 STR, -1 CON, -1 DEX, +1 WIL, +1 PER
Ancient:	-1 STR, -1 CON, -1 DEX

Most heroes begin play as young adults. If your players see their characters as unusually young or old, you may allow them to apply the *adolescent* or *mature* modifiers to their Ability Scores.

How long do characters live? Generally, as long as you want them to. If you decide to monitor age closely in your game, refer to TABLE G1: AGE CATEGORIES BY SPECIES. The table shows the baseline age breakpoints for heroes and supporting cast members of different Progress Levels. As technology progresses, the lifespan of each species increases. This simulates the availability of medical technology, nutritional and dietary advances, and environmental integrity that work to slow or even reverse the aging process.

Table G1 uses the Earth-based solar calendar to measure years. Not

TABLE G1: AGE CATEGORIES BY SPECIES

Progress Level
0-3

4

5

6

7

8

9

Human

AD	12	15	17	17	17	17	17
YA	15	21	25	35	50	72	99
MA	28	35	40	79	122	229	549
MD	41	51	62	130	172	304	849
OD	50	63	85	153	201	349	999
AN	+2d12	+2d12	+2d12	+3d12	+4d12	+6d12	+10d12

Fraal

AD	17	22	27	27	27	27	27
YA	32	49	61	85	113	147	169
MA	50	77	100	136	195	259	272
MD	78	118	153	205	287	362	386
OD	119	176	225	287	389	489	517
AN	+2d12	+3d12	+2d20	+3d20	+4d20	+5d20	+6d20

Mechalus

AD	14	17	23	23	23	23	23
YA	23	27	41	57	72	95	121
MA	32	47	69	95	124	159	201
MD	49	69	94	134	175	223	275
OD	64	89	123	178	231	296	366
AN	+d8	+d12	+3d12	+4d12	+6d12	+4d20	+6d20

Sesheyan

AD	13	15	18	18	18	18	18
YA	21	25	31	37	53	75	89
MA	33	41	48	62	94	131	163
MD	49	56	69	91	131	187	221
OD	64	76	91	123	173	252	302
AN	+2d6	+2d6	+2d12	+3d12	+4d12	+5d12	+6d12

T'sa

AD	7	9	12	12	12	12	12
YA	12	15	19	24	29	39	49
MA	18	24	31	38	46	66	81
MD	25	34	41	52	64	94	111
OD	33	45	54	69	81	119	141
AN	+d6	+d6	+d6	+d8	+2d8	+2d12	+4d12

Weren

AD	10	13	15	15	15	15	15
YA	20	25	29	37	45	55	71
MA	35	40	47	64	76	83	112
MD	51	65	73	94	115	121	167
OD	71	88	98	119	151	167	219
AN	+d8	+d8	+d12	+2d12	+3d12	+4d12	+6d12

AD = adolescent
YA = young adult
MA = mature

MD = middle-aged
OD = old
AN = ancient

all species use the Earth standard to measure their age. Thus, a middle-aged sesheyan might offer a different number if asked his age. If you need to determine the maximum lifespan of a hero or supporting cast member, simply check the *ancient* age category, roll the listed dice, and add the result to the number given for the *old* category. For example, the Gamemaster wants to find out the natural lifespan of Gryldach, a weren mercenary in his PL 7 campaign. He then rolls 3d12 (getting a 12) and adds the score to 151 (for a total of 163 years, in this case).

Few campaigns ever span a length of time that a hero dies of old age. However, a time-hopping adventure might bring heroes face-to-face with younger or older versions of themselves. For that matter, the time travel process itself might age or rejuvenate the heroes. Relativity can be a great excuse for advancing the age of some heroes while the story continues.

Finally, advanced medical technology or secret genetic experiments might reverse the aging process. Since heroes tend to blunder into situations like this fairly frequently,

you shouldn't feel as though you're required to retire one of your players' favorite heroes just because he's become a bit long in the tooth. Anything can happen.

ABILITY SCORE GENERATION

Determining the method by which your players generate their heroes' Ability Scores is an important decision. The following text gives you several methods to choose from.

Assigned Ability Scores

The method described in *Chapter 2: Hero Creation* in the *Player's Handbook* details the preferred route for creating new heroes. This method allows a player to assign 60 points among the various Ability Scores. You don't even have to be present when the player puts his character together—just review the hero sheet once the player finishes selecting his profession, career, and skills.

It's Your Game

The exact number of points that your players divide among their heroes' Ability Scores is up to you. The *Player's Handbook* presents 60 points as a good number for a heroic campaign. Heroes average a 10 in each Ability Score.

If you're running campaign with heavy elements of realism, you can decide to hand out 54 points, creating an average of 9; for a superheroic campaign, 72 points may be appropriate, creating an average of 12. Don't be afraid to experiment with new campaigns and adaptations of the rules.

The assigned score method has the advantage of leveling the playing field. All heroes are created equal, and every player has a fair chance to individualize Ability Scores as desired.

One downside of the assigned score method is that it lends itself to min/maxing. Min/maxing is the practice of building a hero to gain the most benefits from the rules system while minimizing disadvantages and vulnerabilities. For example, a player may set his Tech Op hero's Constitution score at 6 because he intends to stay out of harm's way as much as possible. You should expect a little min/maxing, but when you see every one of your players following the same course, you might want to suggest building a better-balanced party.

Who Needs a Personality?

Personality is an Ability often shorted by players building combat oriented or technically oriented heroes. This isn't entirely unreasonable. The tough-talking soldier who constantly picks a fight, or the engineer who's more comfortable with machines than with people, are both acceptable heroes.

You may tire of seeing PER 4 and PER 5 heroes stomping around in your campaign. Here are a couple of things you can do to bring respect back to Personality:

► **Personality-Based Scenes & Adventures:** Imagine how the players will react when you create an adventure that requires the heroes to use Interaction, Deception, or Leadership in order to succeed. You can't do this all the time, but every now and then it's perfectly acceptable to confound the heroes because they didn't have the skills they needed.

► **Random Character Generation:** Instead of allowing players to build characters as described in *Chapter 2 of the Player's Handbook*, use dice rolls to generate Ability Scores; some of your Combat Specs may actually end up with average or superior Personality scores.

► **Remember Abusive Heroes:** Some players think that a big gun is a substitute for wit and charm. If you put yourself in the shoes of your supporting characters, you'll see that this shouldn't be true. When a hero threatens a supporting character with physical violence, he's got a good chance of getting his way . . . for the moment. But the victim will certainly harbor bad feelings, and he might try for retribution in the future. The threatened person may call the authorities or contact a powerful crime lord, asking for protection. Additionally, he may slap a lawsuit on the hero or file charges. He may even round up a lynch mob and set off to bring the hero to justice. In short, even heroes have to live with the consequences of their actions.

Random Ability Scores

Using this method, a player rolls 2d6+2 for each of his hero's Ability Scores. Of course, random generation is, well, random. It's possible that a hero or villain rolled up this way could have Ability Scores set at 5 or 6, or he could get a battery of Ability Scores at 11 or higher.

Fortunately, you have a tool available for dealing with heroes who possess scores that are too low for your campaign. A hero without any Ability Scores of 11 or higher can raise one score of his choice to 11. Obviously, it's best for the hero to raise the lowest of his or her Ability Scores.

TABLE G2: RANDOM ABILITIES BY PROFESSION

Combat Spec	Diplomat	Free Agent	Tech Op	Mindwalker
STR 10+d4	STR 4+d8	STR 6+d6	STR 4+d6	STR 4+d6
DEX 8+d4	DEX 4+d8	DEX 10+d4	DEX 8+d6	DEX 4+d8
CON 8+d6	CON 4+d8	CON 6+d6	CON 4+d6	CON 8+d6
INT 4+d8	INT 8+d6	INT 8+d6	INT 10+d4	INT 8+d6
WIL 6+d6	WIL 8+d6	WIL 6+d6	WIL 8+d6	WIL 10+d4
PER 4+d8	PER 10+d4	PER 6+d6	PER 6+d6	PER 6+d6

If none of the scores that are left are 9 or better, the player can bump another score of his choice—probably the second worst—to 9. This guarantees that the hero qualifies for a profession, and that the player has a viable character for the game. You can also use this rule to “power up” villains or other supporting cast members.

What about heroes that roll an astonishing set of Ability Scores? You can tone down a character to a level appropriate for your campaign. Simply have your players prune their characters' Ability Scores until they fall under the reasonable limits that you desire. For example, most players will understand if you limit their hero to a single score of 14, two scores of 13, and three scores of 12.

◆ **Example:** Cindi rolls a character with the following scores: 14, 13, 13, 13, 12, 12. The Gamemaster can ask her to change one 13 to a 12 in order to meet the Ability Score maximums. If Cindi's character had six scores of 14 (an unlikely roll, by the way) the Gamemaster could require her to drop two to 13 and three to 12.

You can decide if players can place randomly generated Ability Scores in any order, or if they must assign the scores in the order they're rolled. The advantage to arranging the scores to the player's taste is that the player can tailor his hero's abili-

ties to fit a specific profession. On the other hand, requiring a player to arrange the scores in the order he rolls them can help a player decide what kind of character to play when he doesn't know what he wants to create.

Alternate Method I

You may have a player in your group who knows that he wants to run a Combat Specialist or a Free Agent. Using the method detailed on TABLE G2: RANDOM ABILITIES BY PROFESSION, a hero automatically begins with the scores necessary to qualify for a specific profession.

This method is also useful for building supporting characters quickly. If you don't want to spend too much time thinking about which combination of Ability Scores will provide you with the perfect villain or supporting cast member, try rolling the character's Ability Scores with this system. Species minimums and maximums still apply.

Alternate Method II

Other players may want to create a hero belonging to a specific species. The dice generation system shown on TABLE G3: RANDOM ABILITIES BY SPECIES, guarantees a workable character of the appropriate species. It also ensures that the alien qualifies for at least one profession.

You can use this system to generate random characters of the appropriate species. This system strongly steers aliens toward their respective archetypes—weren almost always come out as Combat Specs, sesheyans as Free Agents, mechalus and t'sa as Tech Ops, and fraal as Diplomats.

Alternate Method III

You may find that a 2d6+2 roll is too unpredictable for your tastes, but you don't like the way players skimp on some Ability Scores when assigning their points. In this alternative, heroes begin with base scores of 5 in all six Ability Scores. The player then rolls 7 six-sided dice. The player adds the result of each die to any Ability Score he wishes. Players can't split a die result—they must add one whole die roll to one score—though they can add multiple die rolls to a single score. Species minimums and maximums apply.

This system allows a player to steer a character toward specific strengths and weaknesses without assigning exact numbers. You may find this system useful, as it enables you to create villains and supporting cast members who possess defined strengths and weaknesses.

◆ **Example:** Bruce wants to create a Combat Spec with lightning speed. He rolls 7d6 and comes up with 2, 2,

TABLE G3: RANDOM ABILITIES BY SPECIES

Fraal	Mechalus	Weren	Sesheyan	T'sa
STR 3+d6	STR 8+d6	STR 10+d6	STR 6+d6	STR 3+d6
DEX 5+d6	DEX 8+d6	DEX 4+d6	DEX 11+d4	DEX 10+d6
CON 3+d6	CON 4+d8	CON 9+d6	CON 4+d6	CON 4+d6
INT 11+d4	INT 11+d4	INT 4+d8	INT 4+d8	INT 10+d4
WIL 8+d8	WIL 5+d6	WIL 4+d6	WIL 7+d8	WIL 4+d8
PER 9+d6	PER 3+d8	PER 5+d6	PER 6+d6	PER 7+d6

2, 3, 4, 5, and 5. In order to qualify as a Combat Spec, he needs a Strength of 11 and a Constitution of 9. Bruce also wants a high Dexterity. Here's how he assigns the dice:

Strength:	5 + 4 + 2 = 11
Dexterity:	5 + 5 + 3 = 13
Constitution:	5 + 5 = 10
Intelligence:	5 + 2 = 7
Will:	5
Personality:	5 + 2 = 7

Bruce chose not to assign any dice to his Will score, and he doubled up on the dice he assigned to Strength and Dexterity.

Other Building Methods

While the method you choose for generating Ability Scores is one way to customize your campaign, heroes aren't defined by Ability Scores alone. The hero's choice of profession and the skills he chooses are every bit as important.

Here's another way to build a character: have the players pick the skills they think the hero needs before assigning a single Ability Score. After the players create a package of four or five broad skills that define their heroes' talents, you can determine which professions and Ability Scores match these skills. Assigning Ability Scores is a simple process once the player knows what his hero should be good at.

For example, let's say one of your players wants Modern Ranged Weapons, Manipulation, Acrobatics, Deception, and Stealth. He's thinking of a super-spy of some kind. Since four out of his five broad skills rely on Dexterity, he'll want a good Dexterity score. Several of his skills are tied to the Free Agent profession. This player should consider creating a Free Agent character and aiming for the highest Dexterity possible.

Gamemasters interested in adding new dimensions to their players' heroes or their supporting cast members should see "FX" in Chapter 16: *Optional Rules*. The rules there allow more unusual and more powerful heroes to enter your campaign.

DESIGNING NEW SPECIES

Science fiction contains myriads of extraterrestrial creatures. Some pass for human, moving unseen through the circles of our own society. Others are predatory creatures far stronger, smarter, or faster than the most heroic human protagonists. A great number seem to be little more than humans in funny suits, creatures whose alien appearance masks an allegorical illustration of a particular human fault or virtue.

Players can create alien heroes. The five alien species presented in the *Player's Handbook* are not the only extraterrestrial species open to players; they're simply examples of alien races appropriate to a general science fiction setting. If you don't think these aliens fit into the type of game you want to run, you can declare one or all of them off limits to your players. Similarly, you can develop entirely new species appropriate to the needs of your campaign, or you can leave the design of alien heroes to your players' imaginations.

No Statistics!

A special, free-form way to build a hero is to have a player describe to you what he thinks his character should be good at. You can build the hero to match what the player has requested. This is not a bad way to get a novice player into a game quickly. You can also use this alternative with very advanced players who don't want to see the rules system at work in the story.

Build the characters in secret, and don't inform the players of their Ability Scores, professions, or skill scores! You can tell the player, "You think you're pretty strong," or "You've studied demolitions enough to know the basics." A player's hero sheet won't have any numbers on it—just the skills that the hero knows.

Whenever the hero attempts an action, you roll the dice and provide the players with a colorful description of the results.

What's an Alien?

Each alien species possesses several abilities and limitations that differentiate it from humanity. The first of these differences appears in the Ability Scores of each species. Due to differences in physiology and anatomy, some alien characters can exceed human Ability maximums. For example, weren characters can reach a Strength of 16, while frail heroes can possess Intelligence scores of 15. Both of these scores exceed the human maximum of 14.

Alien characters may suffer limitations in other Ability maximums to compensate for this advantage. For example, weren are large and bulky, and can't have Dexterity scores higher than 12.

Since aliens have the same number of points to distribute as humans do, they must make sacrifices to reach extremely high scores in their natural Abilities. Alien characters exhibit superhuman ability in one or two areas, while humans have decent scores in all Abilities. If you want to play a musclebound, gun-toting scientist, you should create a human Tech Op with lots of combat skills; if you want to create the best scientist possible, nothing beats a frail or mechalus hero.

In addition to their higher Ability Score maximums, most alien characters receive some significant advantages or benefits that human characters can't get: Frail begin with psionic powers; weren can inflict mortal damage in unarmed combat; t'sa are naturally armored. To compensate for these innate advantages, aliens have fewer skill points with which to select broad and specialty skills than humans of comparable intelligence. This reinforces the human advantage—humans are generalists who tend to pick up lots of skills.

Finally, each species possesses its own innate skills. For instance, se-sheyans begin play with the Acrobatics broad skill. You can allow players to change these free broad skills, or trade them in for other broad skills, but ask the player to provide a good explanation for why his hero doesn't fit the mold of his species. Put simply, why isn't this hero representative of his or her species?

1 ► Concept

The creation of new alien heroes provides players with a greater variety of choices from which to build their own characters. New species also add layers of detail to your campaign and offer the potential for new storylines. Though not a complex undertaking, species generation requires imagination and a good deal of common sense.

When designing a new hero species, it's best to begin with a general concept before moving to the alien's Ability Scores, powers, and other game particulars.

From time to time, a player might approach you about trying out a brand-new species. There's no reason you can't allow any kind of alien you like into your campaign. However, you should keep an eye on game balance and character power when introducing a new hero species. If every player in your game decides that he wants to try creating a hero of the new species, then that alien might possess too many advantages and too few weaknesses. Even the most altruistic player has a hard time passing up a clear game advantage for the sake of roleplaying alone.

Work with the player using the guidelines for alien creation detailed below.

2 ► Form and Physiology

This category concerns itself with the anatomical makeup of a species. What does the alien look like? Is it humanoid? Bipedal? Quadrupedal? Does it have arms, tentacles, claws, or some other appendages? What is its diet? Can it talk, or does it have a nonverbal method of communication? These are important questions to answer as you create the species. Anything that relates to the alien's anatomical nature falls in this category.

Answering these questions may seem daunting at first. But remember, you don't need to have a xenobiologist's understanding of the alien's anatomical functions. Jot down some quick notes on those characteristics that define the new species. These general ideas will have an impact on later aspects of its design—such as the alien's Ability

Scores, advantages, disadvantages, and motivations.

Form and physiology may also affect the other categories such as history, culture, and psychology later during the alien's design. For example, a species with telepathic communication might not develop a culture based around the written word.

3 ► History

This category deals with the past events and important experiences that helped to shape an alien's character, the alien's inter- and intra-species relationships, and its stellar location or planet of origin.

Past events and historical experiences offer intriguing possibilities for an alien's development. Revolutions, natural disasters, invasions, scientific breakthroughs, "alien" contact, and religious wars are just a few of the possible experiences that could influence the formation of a new species. For example, a species that suffers cruelly at the hands of invaders might develop into an aggressive, warlike people, or they might evidence a large amount of cowardice or apathy in the face of aggressive behavior.

Another important aspect of a species' history is its relationship to others of its kind, as well as its relationship to other aliens. A state of constant civil war might cause a species to develop a high degree of distrust, fear, or antipathy for other members of its species. On the other hand, a species that remains decidedly neutral throughout a system-wide war may gain the trust of all involved planets—thus paving the way for a species whose members are known for diplomacy, tact, and skills at mediation.

Details about a species' planet of origin (or lack thereof) can provide you with a definite blueprint for your alien. A planet known for its hostile environment and deadly flora and fauna may engender a species whose strength and swiftness is only surpassed by its ability to adapt to harsh conditions. Likewise, beings raised on a paradise planet might eschew violence and aggression in favor of more altruistic endeavors.

Don't worry about creating the entire history of an alien civilization. A few simple ideas will give you enough background to create the

Superheroes and Wimps

How heroic is a hero? The two basic measurements of a hero's power are his initial Ability Scores and his level. You can easily monitor Ability Scores during character generation. You should know what kinds of heroes your players are creating, and what method they're using to build them. You'll want to regulate Ability Scores based upon the type of campaign you're running.

Character level, on the other hand, measures the hero's experience and governs the number and rank of the skills he possesses. If you start the heroes in your campaign at level 1, they may grow into high-powered superheroes over the course of time. On the other hand, if you allow the heroes a head start at level 5 or level 7, they'll begin play with several skills near the superheroic level. See "Advanced Heroes" later in this chapter.

type of alien you envision. Other historical events and campaign storylines may form later as your heroes develop and interact with supporting cast members of the new species.

4 ► Culture

Culture includes a species' social institutions, governmental structures, and artistic movements, as well as its customs, mores, religious beliefs, and laws. What type of class structure exists within this species' society? What type of governmental system does it use? Do members of this species have any important or interesting taboos? What about artistic expression? These are just some of the useful questions that can assist you during this section of the design process.

A species' culture heavily influences, and is influenced by, its history. In addition, cultural preferences may steer heroes of this new species into certain professions, or forbid heroes to undertake certain careers. For example, members of a species with highly developed religious beliefs in pacifism might never choose the Combat Spec profession.

◆ Creating a Species: The Laxans ◆

Marlo decides to add a new hero species to her campaign. Before she starts writing down her new species' powers and abilities, she sketches out a general concept.

Form and Physiology

Marlo decides that the new species possesses a slightly more compact body than the average human, and a reddish tint to its skin. In addition, each member of this species has two sets of arms, a superior set as thick as a human's and an inferior set smaller than a human's.

The laxans communicate verbally. However, their limbs play an important part in communication. Marlo decides that this species uses a combination of hand and arm positions to modify its speech. These kinesthetic combinations provide the species with a wider range of expression.

History

Marlo's aliens hail from Laxa IV, giving them their name. It's an Earthlike world with a moderate weather system, abundant resources, and achingly beautiful landscapes—a world that is ripe for conquest.

Expanding this thought, Marlo creates another species, known to the laxans only as The Ones From Above, who conquered the planet and enslaved its inhabitants. These invaders put the laxans to work mining the planet's resources.

Such enslavement could have continued for several millennia, but sometime in the past thousand years, The Ones From Above mysteriously disappeared, endowing the somewhat backward laxans with sudden freedom and an abundance of technology.

The laxans have spent the last millennium absorbing the abandoned knowledge and technology of The Ones From Above and have reached Progress Level 6.

Culture

Their former enslavement has cast a heavy influence on laxans' society. Laxan social structure is nonexclusive and highly democratic. Laxa IV is governed by a planetary

council composed of elected members from provincial councils.

In addition, Marlo decides that laxans are highly suspicious during initial meetings with members of other species. Interstellar trade with Laxa IV requires a good deal of diplomatic skill and patience.

Psychology

Most laxans have internalized the values of liberty and independence; a laxan rarely likes to feel beholden to anyone or anything.

Furthermore, laxans respond aggressively if someone or something threatens their freedom.

Playability

Now that Marlo has some general ideas about the laxan species, she examines these concepts with an eye toward playability. Since the laxans are intelligent, generally humanoid, and able to tolerate human environments, Marlo concludes that they're easily playable.

Ability Scores

Taking into account the general concepts from her initial design, Marlo assigns the following minimums and maximums:

STR	DEX	CON	INT	WIL	PER
4/11	9/16	3/9	5/11	8/15	7/14

The laxans possess incredible hand-eye coordination (in order to effectively utilize their four arms) and a strong sense of self; thus they have high maximums in Dexterity and Will.

On the other hand, none of the laxans' arms possesses great strength. Furthermore, centuries of slaving away in toxic mines has severely compromised their health and physical fortitude, lowering Strength and Constitution scores.

Advantage

► **Multiple Limbs:** Laxans have four arms, two superior and two inferior. They automatically receive the Ambidextrous perk for their superior arms; if they use both these arms in the same phase, they only suffer a +2 penalty to actions performed with their secondary hand.

Laxans must purchase the Ambidextrous perk for their inferior arms. An laxan can use a superior arm and an inferior arm in the same phase. However, the inferior arm still suffers a +2 penalty.

If a laxan uses more than two arms in a single phase, the additional arms suffer a cumulative +1 penalty (+3 for the third arm and +4 for the fourth).

While it's possible for a laxan to use four arms simultaneously in a single phase, the alien cannot concentrate on four tasks at once. Thus, a laxan hero could aim four guns at one or two targets, but not at three or four separate targets.

Weakness

► **Limb Weakness:** Laxans receive a +1 penalty to all Strength-based skill checks, and a +2 penalty to all untrained Strength-based skill checks and Strength feat checks.

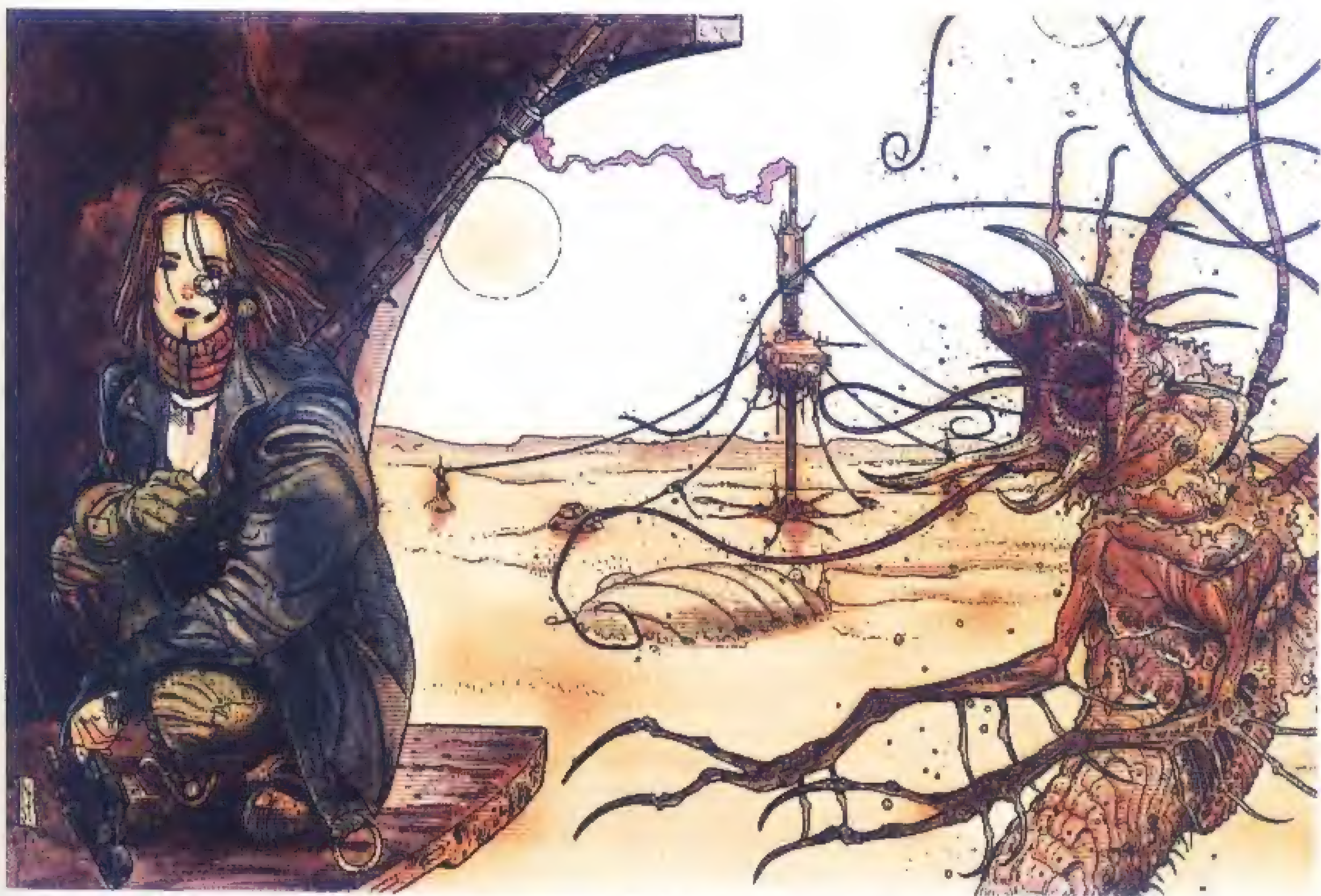
Skills

Examining the laxans' form and other concepts generated during the initial creation process, Marlo decides on the following free skills:

Ability	Free Broad Skill
Dexterity	Manipulation
Dexterity	Vehicle Operation
Intelligence	Knowledge
Will	Awareness
Will	Resolve
Personality	Interaction

The laxans' excellent motor coordination and ability to use their four arms in an independent manner make it logical for heroes of this species to receive the Manipulation and Vehicle Operation broad skills. Likewise, laxan mental fortitude and self-sufficiency are well known, thus Marlo gives laxan heroes two useful Will skills. She adds Knowledge and Interaction into the mix.

With a little forethought and a dose of common sense, Marlo has created a unique and highly playable species for her campaign. All she needs is some willing players, and soon laxan heroes will span the stars.



She's armed, and it's dangerous

5 ► Psychology

Psychology deals with the worldview and ultimate mindset of a species. Psychology influences how the species perceives the world around it, and how it processes that perception. Psychological tendencies can influence and be influenced by the development of a species' culture and history. In addition, an alien's form, how it interacts with the surrounding universe, provides a strong basis for its psychological outlook. An alien's worldview can affect its motivations, moral attributes, and, less obviously, its advantages and disadvantages.

6 ► Playability

After you've fleshed out some general ideas about the new species, you should take a close look at its playability. How interesting, or possible, is it for a player to run a hero of this species? An alien made up entirely of a viscous liquid held together by mental powers might seem like an intriguing possibility. However, if this alien can't interact with its environment or communicate in any way

with other heroes or supporting cast members, players will probably experience frustration and boredom. After all, playing a barely animate pile of goo is only fun for so long.

There's only one hard and fast rule governing the playability of new aliens: They must possess some degree of Intelligence. Unintelligent aliens can't function as heroes.

Despite its form or physiology, a new hero species must have some characteristics that make it compatible with humanity. It must possess the ability to move independently and the fortitude to survive in environments that humanity can tolerate. Its body must include limbs, tentacles, or other manipulative organs that can take the place of hands that humans are accustomed to. It shouldn't possess any innate powers that make it superior to any conceivable human character.

7 ► Ability Score Requirements

When a player creates a character belonging to a new species, the first thing to do is generate the alien's

Ability Scores. What minimums or maximums should you set?

Keep in mind that the normal range of Ability Scores for human heroes falls between 4 and 14, and use the following guidelines. Aliens with Abilities inferior to humans might have minimums as low as 2. On the other hand, aliens significantly superior to humans in a particular Ability may have maximums as high as 16. In addition, species in which the best members will never match the best humans may have an Ability maximum set at 10 or 12. Similarly, if the least member of the new species possesses greater scores than the least humans, the aliens' minimum scores might be 5 or 8.

For example, *fral* are intellectual creatures that can't match the physical capabilities of well-trained humans. Here are the Ability Score minimums and maximums for a *fral* hero:

► **Strength 4/11:** The weakest *fral* heroes aren't any weaker than the weakest humans, but *fral* can't match the muscular and physical development of a human in good shape.

► **Dexterity 4/11:** Again, the least agile fraal aren't any worse than the least agile humans, but they can't match the grace or reaction speed of many human characters.

► **Constitution 4/10:** The same is true for stamina, resistance to damage, and overall health. Even the toughest fraal only makes it slightly above the human average.

► **Intelligence 9/15:** There's no such thing as an inferior mind among the fraal. Some fraal can even exceed human capabilities, while even the dimmest fraal matches the human average.

► **Will 9/16:** Intuition, resolve, and understanding are the defining characteristics of the fraal race. The weakest-willed fraal equals the average human, and many fraal possess significantly stronger wills than humans.

► **Personality 4/15:** The most personable and charismatic fraal are slightly better than humans. Otherwise the fraal have a normal variation that parallels the human range of Personality.

Any new alien heroes that you or your players create should stand on equal footing with the other characters in the campaign. Give the new alien species a total of number of points to distribute among their Ability Scores equal to those given to other heroes. In the typical campaign, this total is 60 points.

8 ► Innate Skills

The finishing touch for an alien is the array of free broad skills that describe its natural talents. What skills should every hero of that species possess? The answer depends upon your conception of the new species. If you want to create an alien without physical form, a species composed entirely of mental energy, then you would most likely assign Intelligence-based skills. Likewise, a super-strong species might receive only Strength- and Dexterity-based skills. Remember to assign free broad skills with an eye toward game balance. For example, it's unlikely that a species would develop only the most expensive broad skills.

See Chapter 2 in the *Player's Handbook* for examples of free broad skills for aliens.

9 ► Advantages

While the special advantages possessed by an alien are the most interesting part of designing a new species, they're also the trickiest to design. Godlike innate gifts that allow a hero to emerge victorious easily spoil the excitement of the game. Gamemasters must guard against designing overpowered special abilities or allowing such abilities into their campaign.

Here are some examples of special advantages appropriate to an alien hero:

- Action check bonus (t'sa)
- All-around vision
- Armor (t'sa)
- Camouflage (weren)
- Environmental capability; tolerates Class 2 or Class 3 environments without aid
- Flight (sesheyan)
- Mental powers (fraal)
- Natural resistance to temperature extremes, radiation, particular energy forms, poison, or disease
- Natural weaponry (weren)
- Poison
- Regeneration; quickly recovers from wounds or from mortal damage without surgery or treatment
- Increased resistance modifier to one Ability Score
- Skill bonus (mechalus, t'sa)
- Sprinting/pouncing
- Swimming/water breathing
- Toughness (weren)
- Unusual sense (sesheyan)

Another good source for special advantages is your favorite science fiction or fantasy novel, or a published compendium of alien species.

10 ► Weaknesses

Balance powerful advantages by assigning unusual weaknesses, such as these:

- Low Ability Scores
- Suffers increased damage from low impact, high impact, or energy attacks
- Reduced senses (sesheyan)
- Action check penalty
- Skill penalty
- Automatic flaw (weren)
- Can't use certain types of equipment—armor, for example—due to body form, cultural taboo, or any other reason you can imagine

PROFESSIONS AND CAREERS

A hero's profession serves one major purpose: definition. Choosing a particular profession brings a hero into focus and identifies his or her role in the campaign. At the same time, the choice of a profession doesn't necessarily restrict a hero to certain capabilities or powers. Anyone can become an outstanding warrior or brilliant scientist—but heroes who aren't Combat Specs or Tech Ops will find that it's not as easy. By defining a hero's natural talents, a profession determines what kinds of adventures, challenges, and encounters best suit the heroes in your game.

If a hero's profession is a broad definition of what he does, his career represents a more specific definition of who he is. The career that a hero selects speaks volumes about his background, his methods and motives, his wealth and equipment, and his approach to an adventure. There are few rules concerning careers; a hero designed without reference to any career is every bit as capable as a hero built on a career blueprint. However, a career does help a player to envision his hero more clearly and understand how that hero will approach an adventure.

Heroes in Society

Heroes are uncommon, but they're not unique. Many of the most important allies, employees, villains, and supporting characters that heroes interact with possess a profession and experience level. Since player-run heroes are at the center of action in your campaign, above-average supporting cast members naturally gravitate toward situations in which they help or hinder the heroes.

People with unusual ability, talent, or drive naturally rise to the upper levels—or the critical positions—of their vocation. In a 50-person police department, four or five of the highest-ranking officers and administrators are Diplomats. Another two or three individuals might be Tech Ops: forensics specialists and criminologists. The department's four or five best fighters might be Combat Specs, grouped into a tactical unit. Finally, two or three of the se-

Diplomats and Contacts

Diplomat characters begin play with one special contact or allegiance. This is a person or organization who can help the hero. See Chapter 7: Attributes for more information on creating a Diplomat's contacts in the campaign.

nior detectives and investigators would work as Free Agents. The majority of the department's personnel are nonprofessionals with skills in Law, Security, Investigation, Interaction, and other areas.

Heroes aren't always the people in charge, even if they are more competent than their superiors. In fact, player heroes shouldn't expect people to defer to them just because they've got a pistol 7 skill and the ruthlessness to use it. Positional authority counts for a lot, and from time to time you might have to remind the players that their heroes must abide by the rules (both written and unwritten) of human society. A tough police detective who ignores the politically appointed commissioner quickly finds himself suspended or out of a job—even though the detective is a level 5 Free Agent, while the commissioner is a bumbling idiot without any skills.

Here are some guidelines for the roles that heroes play in society:

Combat Specs

While a special forces unit such as the Green Berets or the Navy Seals might contain all Combat Specs, most armed forces include only a handful of these heroes. Naturally, Combat Specs appear more often in societies where warfare, unrest, or lawlessness ensure that violence is never too far away. Pacifistic or complacent societies produce very few individuals who study these skills.

Combat Specs may serve in the military (most as middle- or senior-ranking enlisted men and some as officers), in police forces (as tactical specialists), or as thugs or enforcers in criminal organizations. Generally, Combat Specs don't lead troops; senior officers are usually Diplomats who choose Combat Spec as their secondary profession.

Free Agents

In many societies, the Free Agent is not in great demand. The skills a Free Agent normally acquires are often concealed from the public at large; most Free Agents live on the edge of the law. Most of them thrive on anonymity and consciously cultivate an ability to fade into the background.

More than any other hero type, Free Agents prefer to operate alone or as members of small groups; they don't function well in a large, organized force. Even though a government or megacorporation may employ Free Agents, these heroes work best when given the freedom to use their wits, instinct, and special talents as they see fit.

Tech Ops

This profession embraces two related character types: the tech user, such as a pilot or a hacker, and the tech maker, an engineer or a theoretical scientist. People who work with technology are common in modern or advanced societies.

With time, patience, and exceptional performance, a Tech Op can rise to the highest technical or administrative level of his field. A skilled hacker may become a vice president of computer operations, while a sharp scientist could eventually become a department head or an outpost administrator.

Diplomats

Businessmen, military officers, corporate executives, explorers, administrators, ambassadors, entertainers, journalists . . . all of these prominent careers fall into the diplomatic sphere.

Diplomats have an inherent advantage in most social situations (because of their high Intelligence and Personality scores). A trader hero finds that local businessmen want to deal with him; the special skills and talents of entertainers are always in demand; military officers and government administrators have the potential to wield significant power. It's conceivable for an intelligent Combat Spec to rise to command of a ship, or a division of ground troops, but a theater commander or service chief will almost always be a Diplomat with a military specialty.

Diplomats determine what needs

doing, formulate a plan of action, and oversee its execution. They manage the human resources—Tech Ops, Free Agents, Combat Specs, or other Diplomats—necessary to complete the task. Diplomats are natural leaders and organizers. A Diplomat is at his best when surrounded by other talented people who understand the situation.

Mindwalkers

Your campaign may or may not feature these mental specialists. Refer to Chapter 16: Optional Rules for help in making the decision whether to include psionics.

Using Careers

The sample careers presented in Chapter 6 in the *Player's Handbook* include a variety of selections to cover the most famous, popular, or exciting types of characters found in science fiction. However, the list isn't exhaustive, nor are they hard-and-fast rules. You may find that a particular hero or hero type isn't found in the selection of careers available to your players' heroes. And you may desire to create careers specific to your campaign. Feel free to alter existing sample careers or design new ones.

Sample careers don't offer advantages in hero creation. A player who starts from scratch can easily build a very capable hero without using any of the samples. The best role for sample careers in your campaign is a purely descriptive one. They provide a beginning, listing general motivations and skills, as well as overall function in your campaign.

SKILL SELECTION

Skills are the heart of the game. The most important differences between one hero and another lie in their selection of skills. This is the longest and most involved part of creating a hero. You should look over a player's hero when he or she finishes selecting skills and make yourself available to answer questions and offer guidance.

Depending on the setting of your game, heroes may not have all the skills listed in the *Player's Handbook* open to them. There's no point in selecting the Armor Operation-pow-



Laser pistol

ered armor skill in a modern technothriller or espionage campaign; none of the armor types available requires this skill. Likewise, the Vehicle Operation—water vehicle specialty skill is out of place in a campaign set on a desert planet.

Profession Bias

One of the rewards for choosing a profession is the ability to select skills of the profession's group at reduced cost. When a character selects a skill inside his profession, the base cost is 1 point lower. While players are free to pay the full cost and buy any skill, they'll end up with more skills and higher ranks in specialty skills if they stay within their heroes' professional strong points.

For example, many of the combat-oriented skills fall into the Combat Spec skill group, so they're less expensive for a Combat Spec than they are for any other character. The Combat Spec can improve his weapon skills more quickly than a Free Agent, Diplomat, or Tech Op can.

Having to pay 1 point more than another profession does isn't really a deterrent to a determined player. You should encourage players to build any type of hero they wish—as long as these heroes fit into your particular campaign setting, and their players are honest in observing the limitations of Intelligence, profession, and level when purchasing skills. Some of the best characters include a smattering of skills that aren't tied directly to their standard role in the game. For example, a space marine with some Deception skills makes a great barracks con artist.

Generalizing Skills

If you want to make a skill more accessible in your campaign, feel free to change its availability. For example, a campaign centered on starfighters or heavy-armor combat might discourage players from creating Diplomats or Free Agent characters. But if you change Vehicle Operation—space vehicle and Armor Operation—powered armor to Open skills, any hero can purchase them at the base cost.

Style Skills

A few skills are open-ended, allowing players to customize their characters to suit a particular style or image. A couple of examples are the Knowledge and Acrobatics skills. If a player wants his character to be proficient in skateboarding, he's welcome to invent a new specialty skill under Acrobatics called *skateboarding*. "Style" skills such as this one can provide opportunities for roleplaying and make a character truly memorable.

PERKS & FLAWS

Perks and flaws aren't intended to be game-breaking faults or strengths. Rather, they function as colorful characteristics that finish a hero in just the right way.

Perks and flaws don't have to balance precisely. If a hero has skill points left over after skill selection, he can pick up a perk without having to take a flaw to get extra points. Similarly, a hero might overbuy on his skills and compensate with a flaw or two. As long as the points add up and the hero doesn't harm your campaign, it's okay.

Flaws That Aren't Flaws

Some flaws clearly have more of an immediate game impact than others. A Powerful Enemy may not bother a hero for months at a time, but the Fragile flaw could crop up in any combat scene. Make sure that you record any flaws players select for their characters, and make use of them! If a hero's Powerful Enemy never makes an appearance, then the character's flaw, a supposed dis-

advantage, merely represents free skill points that work to the hero's advantage. Finding just the right use for a flaw in an adventure can heighten the dramatic tension just as much as throwing surprise attacks or deadly traps at the heroes.

ROLEPLAYING ATTRIBUTES

Once a player builds the physical skeleton of his hero, it's time for him to think of that character's personality. Motivation, moral attitude, and character traits are powerful tools for developing well-rounded characters. They give you a useful handle on what's important to the heroes in your campaign, and help you design adventures that they will want to undertake and complete.

More information on roleplaying attributes can be found in *Chapter 7: Attributes*.

EQUIPMENT

The last step in preparing a character is equipping him with weapons, armor, and nifty technological devices.

There are four good ways to handle the initial allocation of equipment when a hero is created. First, you can use the guidelines presented in *Chapter 6: Sample Careers* in the *Player's Handbook* to provide heroes with signature gear. Second, you can personally select the weapons, armor, and gear that you think the hero should carry. Third, you can allow the player to peruse the equipment lists in the *Player's Handbook* and choose the items he thinks his hero should have. Review his choices and see if he went over the top or sold himself short. Finally, you can simply allow the hero to begin with starting funds and purchase anything that he can afford. This places a hard ceiling on the number of neat gadgets and high-powered weapons with which a hero can begin play.

If you decide to assign equipment, remember that heroes begin with some pocket cash (see TABLE P30: MONEY ON HAND on page 129 in the *Player's Handbook*). It's not much, but it allows a hero to pay for a few meals, lodging, or small equipment purchases until he earns money from somewhere else.

Progress Level

Before you start allocating equipment to the heroes, you must decide what Progress Level your campaign is set at. See *Chapter 13: Campaign Design* and *Chapter 14: Campaign Architecture* for guidelines. Typically, a modern game is PL 5, a near-future game is PL 6, and a far-future game is PL 7 or PL 8. However, some areas in any setting may be at a lower Progress Level than other areas. For example, there may be areas that rely on PL 6 technology in a PL 7 setting. You could even rule that a hero from a barbaric or rustic world must begin play with arms and equipment of Progress Level 3 or lower, although the hero could quickly upgrade his technology by shopping in an advanced location.

Weapon and Armor Availability

Grenades are cheap and useful in a fight, but there's no way each hero in the party should be toting a half-dozen incendiary grenades everywhere they go. The availability ratings for weapons and top-of-the-line armor on the equipment tables are there to preserve a sense of realism. Many types of weapons and armor are illegal in civilized locales.

It's reasonable for heroes to wear sidearms in rough-and-tumble regions, but rifles, heavy weapons, and explosives aren't acceptable in many places. When the heroes step off their ship into a starport, city, or space station, they should leave their plasma guns and mass rifles behind.

Vehicles and Signature Items

No matter how much money a new hero begins play with, there are a few things he just can't afford. Even a Filthy Rich character can't afford most starships. You may decide to let a hero start with a high-priced piece of gear like this, despite the fact that the hero can't even think of buying it out of his own funds.

The best reason for such generosity is story-related; if you have an easier time creating adventures for a group of heroes with their own ship, you can arbitrarily decree that the

most suitable character has a ship at his disposal. Maybe the hero scraped together the money for a down payment, but still has to pay it off. Of course, this opens the question of what bank, financial institution, or underworld syndicate holds the loan. Let your generosity to a hero expand your own campaign.

What Every Hero Owns

Even if a hero buys nothing else, it's assumed that he begins play with two or three changes of street clothes, shoes, a wallet, a cheap wristwatch, basic jewelry, a toiletry kit, and maybe a suitcase, bag, or trunk to carry all of it in. Beyond this, a hero is free to purchase anything that's available and within his means.

ADVANCED HEROES

Many Gamemasters and players prefer to begin a campaign with tough, experienced heroes. Sometimes this is necessary to ensure that the heroes have a decent chance of survival and a fair assortment of powers and abilities at their command. Usually, even beginning heroes possess a reasonable battery of skills.

If you need to create an advanced character, here's how you can do it. Have the players build their characters normally, but when they're ready to assign skills to their heroes, the extra experience gives the new hero more skill points to work with than a beginning hero normally receives. See TABLE G4: ADVANCED HEROES.

Heroes buying skills at a rank higher than 1 can refer to TABLE G5: BUYING SKILLS AT HIGH RANKS.

If the skill is in the character's profession group, subtract 1 skill point per rank purchased.

For example, you're creating an expert Free Agent. If you decide he should have rank 6 in the *pistol* specialty, it costs him 6 times the *pistol* cost (4 points) plus 15 skill points, for a total of 39 points ($(6 \times 4) + 15 = 39$). A Combat Spec character purchasing the same skill would pay 33 skill points ($39 - 6 = 33$).

TABLE G4:
ADVANCED HEROES

Level	Points	Rank
1st	+0	3
3rd	+13	5
5th	+30	7
7th	+51	9
9th	+76	11
11th	+105	12

Level is the hero's achievement level.

Points is the number of bonus skill points a hero of a certain level receives in addition to the normal total indicated by his Intelligence score.

Rank is the highest rank that can be assigned to any of the hero's specialty skills.

Last Words

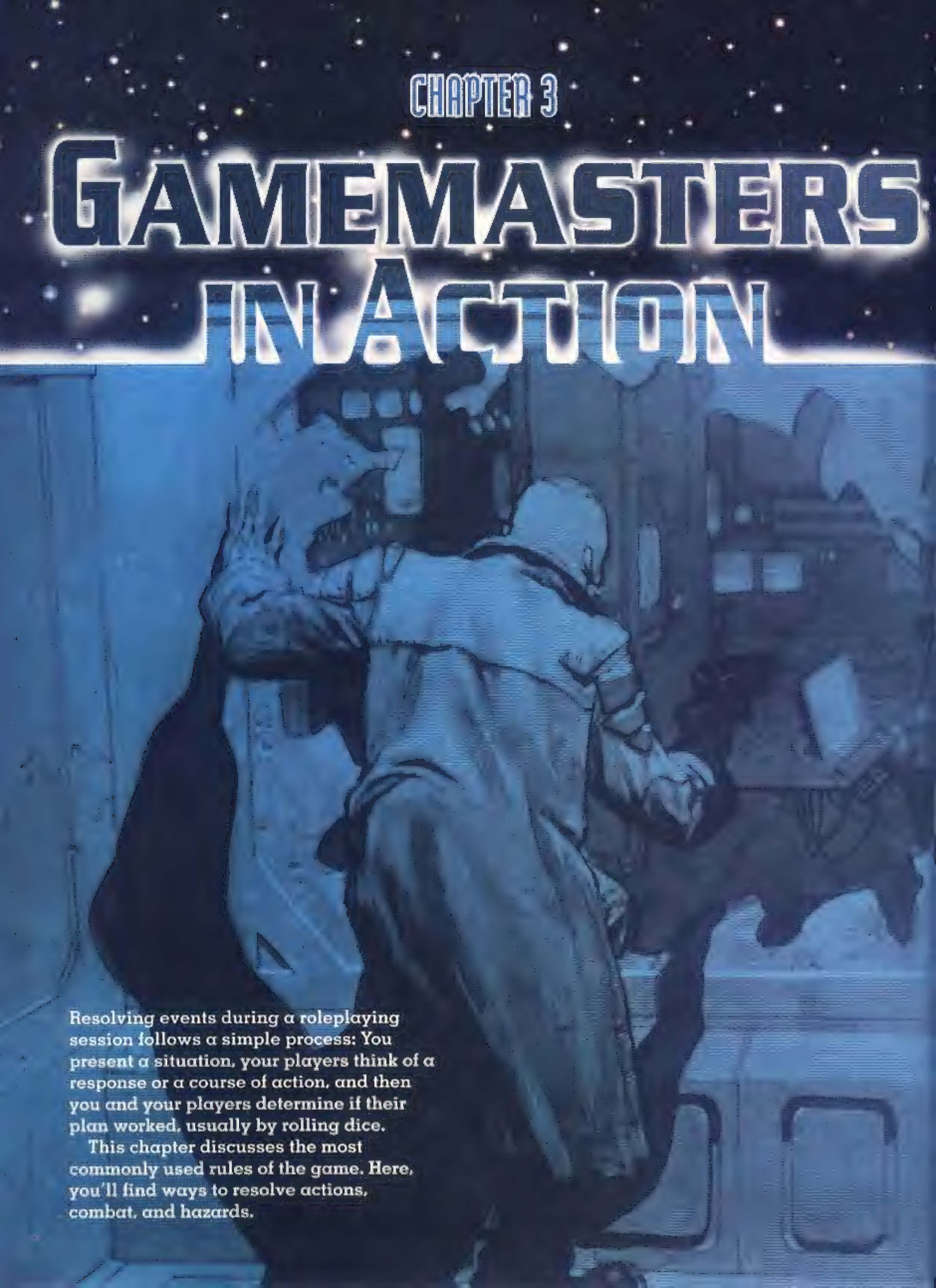
Remember, players are never your adversaries, nor are they your tools or puppets. Keeping watch over your players' heroic characters as they grow and change is one of your most important tasks in any roleplaying game. You should take pleasure in seeing your heroes' accomplishments as your campaign grows. Their heroes give dialogue and expression to the stories you create.

TABLE G5:
BUYING SKILLS AT
HIGH RANKS

Rank	Cost
1	list price
2	$(2 \times \text{list}) + 1$
3	$(3 \times \text{list}) + 3$
4	$(4 \times \text{list}) + 6$
5	$(5 \times \text{list}) + 10$
6	$(6 \times \text{list}) + 15$
7	$(7 \times \text{list}) + 21$
8	$(8 \times \text{list}) + 28$
9	$(9 \times \text{list}) + 36$
10	$(10 \times \text{list}) + 45$
11	$(11 \times \text{list}) + 55$
12	$(12 \times \text{list}) + 66$

CHAPTER 3

GAMEMASTERS IN ACTION



Resolving events during a roleplaying session follows a simple process: You present a situation, your players think of a response or a course of action, and then you and your players determine if their plan worked, usually by rolling dice.

This chapter discusses the most commonly used rules of the game. Here, you'll find ways to resolve actions, combat, and hazards.

ROLLING DICE

Dice represent the element of chance and uncertainty involved in risky situations like combat, life-or-death negotiations, and technical tasks. If your heroes were guaranteed success every time they tried something difficult, the adventure wouldn't be challenging or believable.

Not Rolling Dice

Calling for a skill check isn't always the way to respond to a player's intentions. You're the playwright and narrator, and many actions take place without the need for rolling dice. Should a hero have to make a roll to cross a street? Of course not... unless the hero is being shot at, running after a fleeing villain, or in New York City during rush hour.

Assume that a hero can get a meal at a restaurant without Interaction skills and buy candy from a machine without using a Dexterity feat check to get the change into the slot. In short, when your heroes are engaged in activities that ordinary people

perform routinely, don't bother with dice.

Dice are also unnecessary when players are considering story decisions for their characters. No player should have to roll dice to make up his hero's mind—unless the hero is trying to fight off an evil mental influence. If the players decide that their heroes are going to Washington, D.C., it's silly to force them to make Navigation or Vehicle Operation checks to get there—unless the trip is somehow challenging.

Ultimately, it's your prerogative to decide that certain actions automatically succeed or fail. If a human hero decides to leap a 50-meter gap between two buildings with nothing more than a running start, you're within your rights to say, "Well, you're a good jumper, so the first 7 or 8 meters go just fine. The next 40 aren't going to work out."

Most of the time it's best to give heroes a chance of success, however small. Rule out the patently ridiculous, not the difficult. If the action is remotely feasible, let the player make a check with a hefty penalty.

The Core Mechanic

The core mechanic relies on *skill checks* and *feat checks*. These are d20 rolls compared to the character's relevant score. If a player rolls equal to or lower than his hero's skill score or Ability Score, he succeeds. If he rolls higher than the score, he fails.

Since some tasks are harder than others, the d20 (the *control die*) is rolled with a second situation die that is added to or subtracted from the d20 result. For easy tasks, the situation die is subtracted from the d20, making it more likely that the combined roll will generate a low number and result in success. For difficult tasks, the situation die is added to the d20.

Control Die + Situation Die	Difficulty Level	Average Roll
d20+3d20	Nearly Impossible	42
d20+2d20	Gargantuan	31.5
d20+d20	Grueling	21
d20+d12	Formidable	17
d20+d8	Challenging	15
d20+d6	Hard	14
d20+d4	Tough	13
d20+d0	Average	10.5
d20-d4	Easy	8
d20-d6	Very Easy	7
d20-d8	Extremely Easy	6
d20-d12	Cakewalk	4
d20-d20	No Sweat	0

The *average roll* shows the median result of each particular combination of dice. If you consider that a talented hero has a skill score of 14 to 18, you can get a good idea of the odds of success.

Who Rolls?

While it's usually assumed that players make dice rolls for their heroes and the Gamemaster makes rolls for the supporting cast, you aren't forced to follow such a convention. You may prefer to focus your players' efforts on roleplaying by relieving them of the burden of rolling dice at all. And on occasion you won't want players to know the exact result of their actions.

Of course, many players take pleasure in making a spectacular roll from time to time, and players might accept the occasional failure when it's caused by their own bad roll. It's up to you decide which approach is best for you, your players, and the demands of your campaign.

You can use the core mechanic in one of two distinct ways. You can *eyeball it* or *figure the odds*.

Eyeballing

Now that you know the core mechanic, you're done learning the ALTERNITY game. It's that simple. Whenever a player attempts a task, assign a situation die that seems appropriate to the situation. Use the definitions of each difficulty level as a guideline. For example, a Grueling action has a +d20 situation die, an Average action has a +d0, and a Cakewalk has a -d12.

Here's an example using this fast and loose method for assigning situation dice in a game situation. The hero, Sergeant Raterman, has found himself suddenly in a firefight.

Player: "Raterman kneels behind the oil drum and squeezes off a couple of rounds with his rail pistol. What do I roll?"

Gamemaster: "Let's see . . . the thug is about 20 meters away, and he's hiding behind a concrete support column. Looks like a Hard shot. Roll your d20 control die and add a d6 situation die."

The Gamemaster didn't take anything into account other than gut instinct about how hard the task should be. If the thug was standing out in the open, looking the other way, the Gamemaster might have called it a Very Easy shot and assigned a -d6 bonus instead.

There's nothing more to the eyeballing method. It allows for a fast-moving style of play that focuses on roleplaying instead of roll-playing.

It's Your Game

The descriptions of the various situation die steps are suggestions. In most heroic settings, the +d0 situation die indicates a task of Average difficulty. If your game presents a harsher and tougher universe, in which fate seems against the heroes wherever they turn, maybe the +d6 situation die represents Average difficulty. Use your discretion: it's your game.

Figure the Odds

The other method is a little more precise. Instead of arbitrarily assigning a difficulty level, the Gamemaster applies individual step modifiers, considering each condition that applies. It's not as fluid or off the cuff as the first method, but it's a little more accurate and realistic. In time, this method can be almost as fast.

Start with a *base situation die*. A feat check, an untrained skill check, and a broad skill check have a +d4 base situation die. A specialty skill check uses a +d0 base situation die.

The base situation die is just that: a base. From this starting point, you'll count *bonuses* or *penalties* to reflect the exact situation. Specific actions and situations may impose, for example, a +1, +2, or +3 step penalty. Others may apply a -1, -2, or -3 step bonus. Bonuses and penalties larger than this are rare.

Firing a pistol at short range gives a -1 bonus, so the hero's roll goes from d20+d0 (Average) to d20-d4 (Easy). The target's resistance modifier may make the shot tougher; if the hero's shooting at a villain with a +2 resistance modifier, now the player must roll the d20 and add d4. The Gamemaster can take into account any additional modifiers he wishes. The room is pitch black? Add another +3 steps. The hero's firing an accurate laser pistol? Take a -1 bonus.

Here's an example:

Player: "Raterman kneels behind the oil drum and squeezes off a couple of rounds with his pistol. What dice do I roll?"

Gamemaster: "The thug is at medium range, so that's a +1 penalty, and he's using a concrete column for cover, for a +2 penalty. Call it a +3 penalty altogether. Your base situation die is +d0, so you're rolling a d20+d8."

Most Gamemasters use a combination of figuring the odds and eyeballing. In scenes involving combat, precision is more important. In other scenes, especially during intense roleplaying, game mechanics can be minimized by a Gamemaster who eyeballs the situation and moves on.

Extreme Difficulty

Heroes naturally try to do things that defy the laws of probability. On occasion, a hero's skill check or feat check picks up so many penalty

steps that it goes beyond the level of d20+d20. For example, a hero might have a base situation die of +d4 on a broad skill, and the conditions might add a +6 penalty to this roll.

For each step the hero goes past Grueling (d20+d20), add another d20 situation die. If your players routinely attempt nearly impossible feats on the off chance that they'll get lucky, consider applying some special consequences for a Failure result. Sure, the hero might take down the villain with a called shot to the head, but if he misses, it's likely that the hero will take out a hostage.

Extreme Ease

At the other end of the spectrum, sometimes heroes find themselves in extremely favorable situations. A hero might be a skilled engineer, attempting to fix a minor problem with lots of technical assistance; his roll could easily go to -5 steps (or better) depending on his exact situation. When a situation die bonus becomes greater than -d20, don't roll the dice. Simply rule that the hero succeeds.

There's one clear exception to this rule. You should roll the dice when the exact degree of success—Amazing, Good, or Ordinary—might make a difference. Attack rolls and similar combat actions are an example. In such a case, the situation die never gets better than -d20.

Resistance Modifiers

When a character attempts an action that affects another hero, a standard modifier applies: the resistance modifier. This number represents innate resistance to a specific form of attack. Resistance modifiers are based on Ability Scores. Different skills use different resistance modifiers, as shown on the table on the next page.

Degrees of Success

The degree of success on a skill check or feat check is almost as important as whether the check is simply a success or a failure. When a hero rolls equal to or less than his or her skill score, an Ordinary success is assured. If the roll is equal to or less than one-half the hero's skill score (rounded down), it's a Good success. If the roll is equal to or less than one-quarter of the hero's skill score, it's an Amazing success.

TABLE P10: SKILLS & RESISTANCE MODIFIERS

Acting Character's Skill	Resisting Ability
Deception	Intelligence
Entertainment	Intelligence or Will
Heavy Weapons	Dexterity
Interaction	Will
Leadership	Will
Melee Weapons	Strength
Modern Ranged Weapons	Dexterity
Primitive Ranged Weapons	Dexterity
Psionic Skills	Will
Stealth	Will
Street Smart	Intelligence or Will
Unarmed Attack	Strength

Marginal Success

In many game situations, a hero doesn't have a chance to fail outright. When this is the case, a *Marginal success* is possible. See the skill descriptions in *Chapter 4: Skills*.

When do Marginal successes come into play? They shouldn't be used in combat scenes or important challenge scenes. Even using a non-combative skill such as Computer Science becomes difficult for a hero when bullets are flying.

Marginal successes shouldn't be used for resolving an all-or-nothing situation such as jumping a chasm. There's no chance of anything other than failure or success.

Automatic Success

A roll of 1 on the control die is a success, regardless of what comes up on the situation die. The result of the situation die is taken into account only for the purpose of determining degree of success. At a minimum, the roll of 1 on the control die indicates an Ordinary success is achieved.

You have the option to nullify the possibility of an automatic success. You should reserve this option for special situations, and warn the player whose hero is attempting the action beforehand. Maybe the task is incredibly difficult and important to the flow of the story. You may not want to allow an untrained character to simply get lucky.

Critical Failure

A roll of 20 on the control die indicates a Critical Failure or some form of bad luck. Even if the result of the skill check or feat check with a situa-

tion die turns out to be a success, the roll fails automatically. Heroes with apparently infallible skill scores can still fail through that 1-in-20 chance of a Critical Failure.

When a Critical Failure occurs, it's appropriate for you to apply a story result that indicates a disastrous event has occurred. Some skills list specific consequences of Critical Failures, but most of the time it's up to you to decide what happens. Here are some complications that could arise:

- ▶ A tool breaks or malfunctions.
- ▶ A vehicle suffers a breakdown.
- ▶ A delicate interaction is derailed—a bribery attempt might be interrupted by the arrival of a superior officer or a scam might be broken up by an honest bystander.
- ▶ A gun jams or misfires.
- ▶ An ally or bystander is jeopardized by weapons fire.
- ▶ Bad weather makes a routine journey or trek unusually hazardous.
- ▶ A piece of delicate or important equipment in the scene is ruined by a hero's stray weapons fire.

▶ A power spike damages a computer file the heroes are working with.

The mishap should be connected with the task the hero was attempting. The Critical Failure shouldn't necessarily cause damage to any character, but it could result in the possibility of damage—if the hero was hanging on a rope that suddenly breaks, he should get a Dexterity feat check or Athletics-climb skill check to catch himself before he falls into the rocky gorge. If a hero's errant shot endangers a comrade, you may allow the unintended target a Dexterity feat check to dodge the attack.

Performing Actions

The use of a control die, a situation die, and degrees of success is the system used for resolving any action in the game. Later in this book, skill checks and feat checks are discussed more fully, but here's an introduction.

Skill Checks

Skills represent knowledge, experience, and aptitude involving specific tasks. When a hero attempts an action, a skill check is the usual method of resolution.

Each skill is tied to an Ability Score: Strength, Dexterity, Constitution, Intelligence, Will, or Personality. This score is the number used for a broad skill check, and each rank purchased in a specialty skill adds to the score. If a character attempts to use a skill he doesn't possess, he uses his untrained score (one-half of the related Ability Score, rounded down).

For more information on skills and their use, see *Chapter 4: Skills*.

TABLE G6: DEGREES OF SUCCESS

Roll	Result
20 on control die	Critical Failure
Higher than skill score	Failure/Marginal
Skill score or less	Ordinary
½ skill score or less	Good
¼ skill score or less	Amazing
1 on control die	Automatic Success

Complex Skill Checks

A single roll determines success at most tasks. When trying to jump across a chasm, shoot a gun, or notice a hidden ambusher, success or failure is immediately apparent.

Other tasks that are more complicated or time-consuming demand a complex skill check. Some skills automatically use complex resolution. You can also use complex skill checks to build suspense and tension, even in circumstances that normally use single checks. For guidelines on the use of complex skill checks, see *Chapter 4: Skills*.

Feat Checks

Sometimes no skill is applicable or a task involves a measure of raw ability, not a specific skill. In these cases, instead of calling for a skill check, you should call for a feat check. Guidelines for the use of feat checks appear in *Chapter 4: Skills*.

Perks and Flaws

Sometimes it's necessary to test the effectiveness of the special power or weakness that perks and flaws represent. In play, perk and flaw checks act as special kinds of feat checks. Each perk and flaw is tied to a specific Ability Score. For more information on perks and flaws, see *Chapter 5: Perks & Flaws*.

Character vs. Character

Most actions are resolved by a single roll made by the player of the acting character; opposition on the part of a second character, if any, is reflected by a resistance modifier applied to the acting character's roll.

Occasionally more than one character appears to be active—such as during an arm-wrestling match or when two heroes try to interact with the same person. If you feel that both parties involved are entitled to a roll, allow both to roll using their appro-

priate skill scores—and don't forget the opponent's resistance modifier. Then compare the degree of success each achieves—Ordinary, Good, or Amazing. The hero with the better degree of success wins the contest.

If both characters score the same degree of success, the issue isn't resolved yet—they're locked in a struggle, or they've failed to sway the object of their attentions. The contest continues next round as the heroes try again.

To build suspense and tension, you can resolve competitive character actions with simultaneous complex skill checks. For this method, allow a number of successes to accumulate through individual rolls as with a normal complex skill check, and when a certain number of successes is achieved, a character is declared victorious.

Assisting Actions

Heroes and villains alike can benefit from a bit of help from time to time. Working together to accomplish a task is one of the best ways to increase the chance of success. Every additional character involved beyond the first one adds a modifier to the attempt. The benefits of cooperation are described in "Assisting Actions" in *Chapter 3: Heroes in Action* in the *Player's Handbook*.

Apply limits to assisting actions as you see fit. For a character to assist, the conditions have to be right. For example, only so many characters can fit behind a door in an attempt to push it open.

Second, don't insult the intelligence of your villains and supporting cast by forcing them to always work alone while the heroes work together. A villain who leads dozens of followers should have the same sort of cooperation working for him.

Two Actions at Once

When heroes attempt to perform more than one action at a time, the standard rule is to apply a +2 step penalty to the first action and a +4 step penalty to the second action.

You can use your discretion, though, to adjust this general rule to fit the specific conditions during a game. Sometimes performing two actions shouldn't incur any penalty. When a character leaps across a chasm, it's assumed that grabbing the ledge and holding on is simply part of the action. At other times, the

Make the Results Memorable

Sometimes, just knowing that a character succeeds or fails at an action is enough to keep the game moving. However, if you use degrees of success or failure to spice up your description of the action, you can turn an average scene into a remarkable one.

For example, Failures and Ordinary successes shouldn't be remarkable in and of themselves, though the drama of a specific situation can turn them into something grand and glorious. Good successes should be described with more flair and vibrancy, while Amazing successes should stand alongside the most exciting and impressive scenes from your favorite books and movies. Likewise, Critical Failures should be spectacular—not just because of the drama of the moment but due to the extent of the failure itself.

Let's look at the same scene described with each possible result. Witness Jason Steel's attempt to leap across a gaping chasm as he pursues an escaping thug:

Critical Failure: Steel braces himself, then starts running toward the edge. His boot catches a jutting rock, sending the hero tumbling into the dirt. Fortunately, he's able to stop his momentum before he slides over the edge, but now he finds himself hanging by his fingertips—on the wrong side of the chasm.

Failure: Steel trips, falling flat on his face. He can try to make the leap again after he collects himself, but meanwhile the thug continues to put distance between them.

Ordinary: Steel runs toward the edge of the chasm, leaps, and catches the opposite edge. He can haul himself up in the next phase, but the thug doesn't wait around.

Good: Steel runs toward the edge and leaps gracefully across the open space. He lands in a crouch on the far side, as though it barely took any effort. The thug is still in sight, mildly surprised at the success of Steel's action.

Amazing: Steel runs toward the monstrous chasm and leaps, sailing across the open space like a rocket through the void. He lands on his feet ready to run, not even a hint of effort in his eyes. He's only meters from the flabbergasted thug.

Reaction Scores

A reaction score gives the phase during which a character or a creature first acts (its automatic action check result) and the number of actions that it can take in a round. In this book and in published adventures and accessories, the reaction scores of supporting cast members are provided. For example, a villain might have a score of Good/2, indicating that he acts for the first time in the Good phase and can take two actions in the round.

For your own creations, assume that characters with an action check score of 10 or less have a base reaction score of Marginal. For creatures with a score between 11 and 15, assume their base reaction score is Ordinary. For creatures whose action check score exceeds 15, assume a Good reaction score. Amazing reaction scores are reserved for the most powerful and fastest creatures, and the most intimidating, dangerous villains.

The number of actions per round in this system is the same as that determined for a normal hero. Of course, a character could appear to have more actions per round (as determined from TABLE P7: ACTIONS PER ROUND) than he or she can use. For example, a character with a Marginal reaction score can act only once every round, and someone with an Ordinary score can act at most twice every round.

secondary action shouldn't apply a penalty because it's so easy. A hero who shouts "Run away!" while charging down a corridor or "Surrender!" while firing at the enemy with his rifle isn't really attempting a second action.

On the other hand, you might rule a second action impossible in some circumstances. For example, a swimming character can't use both hands to operate a computer at the same time.

Action Checks and The Supporting Cast

In a scene that's full of heroes and your supporting cast, it can become difficult to keep organized, remember individual action check results, and still keep the scene moving and fun for everyone. So, you have a few options to help you along.

The simplest option is to use a supporting cast member's reaction score. This score gives the phase during which the character or creature first acts (its automatic action check result) and the number of actions that it can take in the round. See the sidebar on "Reaction Scores."

Your second choice is to select a single member of the supporting cast during the scene. This individual can be either the leader of a group of characters or simply a representative member of the group. Roll an action check for the supporting cast, using this individual's action check score. All the supporting cast members will act in the same phase or phases.

Another choice is to make action checks for each member of the supporting cast. It's the most realistic, but also the most time-consuming.

Use or combine these methods as you see fit. You can use reaction scores for thugs and other minor villains, but roll normal action checks for special creatures, villains, or allies. It's your game.

TIME

Time is one of your best tools to maintain an illusion of reality. Many plots and plot devices require time or feature imposing deadlines; by letting your heroes know how much or how little time they have at their disposal, you encourage the players to consider the situation from a real-life perspective. Heroes won't back down if they know that a helicopter waits to pick them up whenever they're ready to leave. Once heroes know that their ride leaves in exactly one hour, their players will feel the pressure to move fast.

Action Rounds

When it's important to know who is doing what and when, scenes are broken into action rounds. The goal of these rules is not to present an utterly realistic simulation of heroes in action—it's to give you a tool that you can use to see how a scene turns out.

Not every scene needs action rounds; if the heroes are questioning a contact or trying to bribe their way past a gate guard, there's no need to keep track of events round by round.

When should you call for action checks and treat the scene as a tactical situation? The moment one character involved in the scene starts to do something that someone else would vigorously oppose—such as run away, pull out a gun, or set a bomb—you should call for action

checks to see which of the characters involved in the scene gets the drop on the others.

The first step in sorting out a scene is determining the order in which heroes, villains, and other characters act. Every character involved, hero or villain, gets to take at least one action during the course of an action round. Depending on a character's speed, luck, and situation, he may be able to take several actions during a round.

An action round is broken into four phases: Amazing, Good, Ordinary, and Marginal. Anything that occurs in the Amazing phase takes place before events in the Good phase, Good phase events take place before Ordinary phase events, and Ordinary events happen before Marginal events.

The action check determines in which of the four phases a character can act. The degree of success that a hero or villain achieves on his action check corresponds to the phase in which the character can take his or her first action of the round. The character can act in this phase, or decide to wait until a later phase.

A character can act in a number of phases equal to his actions per round.

Who Goes First?

When two characters act in the same phase, they're assumed to be acting simultaneously. So, the effects of any action—such as damage—aren't applied until the end of the phase.



No place to hide

If it's absolutely necessary to know who gets to act first in a phase, characters who haven't taken any actions in the round get to act before characters who have taken one or more actions. Characters who achieve the same degree of success act in the order of their action check scores, highest score first. Finally, a character who achieves a Critical Failure result on his action check takes his action last in the Marginal phase.

No Action Check?

Every character involved in a fight is entitled to an action check each round, but at times a character might not be able to make a check. Unconscious characters don't make action checks, although they may be able to roll each round to try to wake up. Characters who are hopelessly trapped or restrained might not be allowed action checks. Finally, heroes who choose to use all-out movement forfeit the ability to make action checks until the round after they decide to stop.

Phases

Each action round lasts about 12 seconds. Each of the four phases of the round takes up about 3 seconds. Here's a short list of things that a hero could do in a single phase:

- ▶ Attempt an unarmed or melee attack.
- ▶ Make a single-shot, burst, or autofire attack with a ranged weapon.
- ▶ Throw a grenade or other thrown weapon.
- ▶ Attempt an athletic or acrobatic feat (jump, climb, daredevil, etc.).
- ▶ Use Stealth to set up a sneak attack.
- ▶ Use Security, Tactics, or Leadership to improve the actions of other heroes.
- ▶ Attempt to use any encounter skill that could reasonably be pulled off with a few words of dialogue.
- ▶ Continue a complex skill check that allows skill checks each phase.
- ▶ Use a psionic power, mutation, or cybernetic enhancement.
- ▶ Draw or change weapons.
- ▶ Open a door with caution, or barge through recklessly and attack.
- ▶ Get into or out of a vehicle.
- ▶ Find and ready an object or de-

vice not carried in the character's hands.

- ▶ Sprint, fly, or swim.
- ▶ Use medical skills to aid an injured character.

Time in the game, like everything else, is imaginary. It's likely to take you and your players five or ten minutes to resolve everything that happens in a single action round. When you play out a scene in a roleplaying game, you're watching everything in slow motion.

Time and Adventures

Keeping track of days, weeks, and months is easy. Here are a couple of measuring sticks for keeping track of time in fast-moving situations.

▶ *Action rounds* fit tactical situations such as combat or fast-moving challenges. There are five action rounds in a minute.

▶ *Minutes* are useful for noncombat searches in small areas, challenges of moderate duration, and brief encounter scenes.

▶ *Hours* are appropriate for strategic movement, long challenges, or lengthy negotiations.

TABLE G7: DETECTION MODIFIERS

Size	Distance	Background	Light	Modifier
Tiny	Very far	Camouflaged	Total darkness	+3 penalty
Small	Far	Obscured	Moonlight	+1 penalty
Average	Medium	Indistinct	Twilight	none
Large	Close	Contrasting	Daylight	-1 bonus
Huge	Very close	Clashing	Bright sun	-3 bonus

You will routinely switch time scales to reflect the conditions surrounding the heroes. A long overland march to a UFO crash site might take hours; searching the wrecked alien ship would be handled in minutes; and any challenge or combat scenes involving the alien creatures and their automated defenses are resolved using action rounds.

Of course, time isn't always an important factor, and in such cases exact precision is not required. For example, you don't need to know whether 35 or 36 minutes have elapsed since the heroes entered the ruins. Keep track of time when it's important, and ignore it when it's not a consideration in your story.

DETECTION

It's natural that your heroes will react to threats they perceive in the world around them. This section provides information to help you determine exactly what they see, hear, smell, and detect. A group of characters with an advantage in firepower might be picked off if they find themselves in a position where they can't see an enemy who can see them just fine.

The Awareness Check

The measuring stick for whether a hero can see, hear, or spot something is the awareness check. Awareness-perception is the proper skill check when it's possible for a character to notice something by sight or sound. Awareness-intuition represents the ability to sense danger when no signs are available to the five senses. Finally, if a hero undertakes a conscious and thorough search for a hidden creature or object, Investigate-search is used instead of Awareness.

Many factors can modify a hero's chance to spot something. How far away is the object? What time of day is it? What kind of ground cover is available? How big is the object or creature? How well camouflaged is it? See TABLE G7: DETECTION MODIFIERS. Choose a condition from each column and add the modifiers together to produce the total modifier.

◆ **Example:** Harris is trying to spot an enemy sniper who just took a shot at him. The sniper's prone (+1), at very long range (+3), camouflaged by his background (+3)—a total +7 penalty (1+3+3=7) to Harris's check. It's also midday (-3), so this is reduced to a +4 penalty.

You can modify these broad cate-

gories to reflect a hero's chance to detect events or objects using other senses. For example, a sound might be described in terms of size (how loud it is), distance, and how much it stands out from the background noise that surrounds it.

Range of Vision

Humans are visual creatures, relying on eyesight as their primary source of gathering information. Heroes have a number of devices available that can augment their vision, including binoculars, imaging goggles, and infrared goggles.

Most encounter scenes or combat scenes begin when the heroes spot their potential adversaries. They may be within weapons range or may have to close the distance. As a rough measure of the distance at which someone or something might be spotted, classify the prevailing visibility and illumination as Amazing (full sunlight in open country), Good (a brightly lit room), Ordinary (an average day or moderately lit room), Marginal (a cloudy day), Slight (light rain or twilight), Moderate (moonlight or fog), or Extreme (total darkness). TABLE G8: VISUAL DETECTION RANGES lists the distances at which a person, a vehicle, and a terrain feature can be seen in certain conditions of visibility.

The ranges on Table G8 are approximations. Use common sense to take into account local conditions. For example, the heroes might be standing only 500 meters from the ocean, but if there's a sand dune between them and the beach, they won't see any water.

Sound

Like illumination, sound can be rated Marginal, Ordinary, Good, or Amazing. Marginal noises are at the volume of a whisper, and Awareness

TABLE G8: VISUAL DETECTION RANGES

Visibility	Object Sighted		
	Person	Vehicle	Terrain
Amazing	2000 m	10000 m	100 km
Good	1000 m	5000 m	50 km
Ordinary	500 m	2500 m	25 km
Marginal	100 m	500 m	5 km
Slight	50 m	200 m	2 km
Moderate	20 m	50 m	500 m
Extreme	2 m	5 m	10 m

checks suffer a +2 penalty. Ordinary sound is equivalent to a conversation at normal volume; no penalty is applied. Good sound includes screams, car backfires, and the like; Awareness checks receive a -2 bonus. Prolonged exposure is annoying but not harmful. Amazing sounds are deafening, at or above 100 decibels. Characters forced to endure prolonged exposure to Amazing sound may need to make Stamina-endurance skill checks to avoid stun damage.

Movement

Your heroes are likely to travel quite a lot; it's rare for villains and their minions to conveniently arrive at the heroes' headquarters to be arrested or disposed of. Villains often lurk in the most remote, inaccessible, and hazardous reaches of the setting. Naturally, the heroes have to go after them in order to keep the story moving. It's your job to get them there.

Strategic Movement

Strategic movement occurs during an interlude in the story, when the heroes aren't doing much other than trying to cover distance. In the most wide-open starlaring adventures, the heroes might visit dozens of star systems in search of the villains' secret base or stronghold. Marching from Chicago to Cleveland through the radioactive wreckage of a bombed-out America would also be strategic movement. Any time the story has to change locations—even getting to the other side of town—you'll need an interlude for strategic movement.

Strategic movement is not always safe and secure. Heroes marching across an untamed world on foot should have dozens of dangerous challenge, encounter, and combat scenes before they reach their destination. If the journey itself is an ad-

venture, use the strategic movement rules to build a rough time frame for the story, and then create plenty of events and obstacles for the heroes to battle through.

◆ **Example:** A group of heroes, led by the brave Sgt. Raterman, crashes 800 kilometers from civilization and has to walk out of the alien wilderness on foot. The overland movement rules below indicate that the heroes will need 20 to 30 days to reach safety. During this month, the heroes may experience a full adventure among impassable gorges, hostile alien savages, and hungry predators. You can make this journey into an epic tale of survival.

The movement rules are intended to be a tool for the Gamemaster, so that you can guess at how long it takes to get from Point A to Point B. They aren't an ironclad straitjacket. There is one general rule you can always apply instead: Make it up! You know it takes about an hour to drive 100 kilometers (about 60 miles) in your car, so if the heroes are using low-tech ground transport to go from one city to the next, just say so—there's no need to plot their hourly positions on your world map.

The most important consideration in overland movement is the mode of transportation available to the heroes. Crossing the Sahara in a light plane is a lot easier than doing it on foot.

Aircraft

Aircraft available travel at several hundred kilometers per hour. Use the cruising speed for the specific vehicle (see *Chapter 12: Vehicles* in the *Player's Handbook*) as its average speed. Don't forget to consider the need for refueling when relevant.

Surface Vehicles

Land vehicles and watercraft travel at speeds of up to 200 kph, but may not be able to move at maximum speed in rough terrain. A jet-pow-

TABLE G9: EXHAUSTION

Stamina Check	Result
Critical Failure	2 fatigue pts
Failure	1 fatigue pt
Ordinary	no damage
Good	no damage
Amazing	no damage

ered racing boat can only use a fraction of its power in rough water or heavy seas, and a sports car might only be able to average 5 or 10 kph in a traffic jam.

Walking

Heroes can't fly, drive, or sail to every place they need to go. Often, they must walk at least the last few kilometers. Refer to "Traveling Long Distances" on page 56 in *Chapter 3: Heroes in Action* in the *Player's Handbook*.

The speed of a march determines how often a hero must make a Stamina-endurance skill check to avoid fatigue damage. Refer to TABLE G9: EXHAUSTION to see how many points of fatigue damage are suffered.

For characters with the Movement broad skill, the frequency of Stamina-endurance checks is reduced by 1 hour per category.

Penalties caused by each point of fatigue damage apply to Stamina-endurance checks.

A typical hero with the Movement skill can maintain a march for 10 to 12 hours before exhaustion sets in. By the end of the march, the character is stumbling with fatigue, but about 60 kilometers have been covered. Recovery of fatigue damage is discussed in the "Durability" section, later in this chapter.

Some types of terrain are more formidable than others. Almost anyone can walk 10 kilometers along a flat stretch of road, but wading through 10 kilometers of thick mud, tangled vegetation, or chest-deep water is a much harder chore. A hero moving through formidable terrain suffers a penalty on his Stamina-endurance skill checks. The Movement-trailblazing skill can reduce or negate these penalties.

TABLE P13: OVERLAND MOVEMENT

Mode of Travel	Kilometers per Hour	Hours per Fatigue Check
Stroll	4	3
March	6	2
Forced march	8	1

Smooth terrain is flat—plains, scrubland, or rocky desert. Trails and minor roads fall into this category. No penalty applies to Stamina–endurance skill checks.

Varied terrain includes sand, hills, light forest, or difficult trails. A +2 penalty is applied to Stamina–endurance skill checks.

Rugged terrain includes thick jungle, swamp, marsh, deep snow, or mountains. A +3 penalty is applied to Stamina–endurance skill checks.

Darkness, inclement weather, and icy or slippery terrain can further complicate overland travel. Each of these or similar conditions adds an additional +1 penalty.

Mounted Travel

Mounts offer three major advantages: They're faster than moving on foot, they carry more gear, and they save their riders from the fatigue they would suffer if walking. Ignore especially slow mounts such as oxen, yaks, elephants, or burros; these creatures don't move any faster than a man on foot, although they can drastically increase a hero's carrying capacity.

Fast-moving mounts such as horses or camels use the movement rates noted below in TABLE G10: MOUNTED TRAVEL. The Constitution score of the animal is the best way to determine the mount's quality.

Combat Movement

In tactical situations, it's often important to know how far a hero or a creature can move with one action.

Movement within an action round is often called combat movement.

Movement rates vary depending on a hero's Strength and Dexterity scores, as given on TABLE P8: COMBAT MOVEMENT RATES on page 39 of the *Player's Handbook*.

Heroes on Foot

Heroes on foot can use their walk, run, or sprint rates, moving the appropriate number of meters any time they take an action to do so. In a tactical situation, a hero can walk or run for as long as he likes—most fights don't last longer than five to ten rounds.

TABLE G10: MOUNTED TRAVEL

Mount Quality	Kilometers per Hour		
	Stroll	March	Forced March
Marginal (CON 10)	3	6	8
Ordinary (CON 12)	4	6	10
Good (CON 14)	4	8	12
Amazing (CON 16)	4	10	14

Stroll: The hero rides at a walking pace for his mount, and dismounts to lead it frequently.

March: The hero rides at a walking pace but may trot or canter for short periods. He dismounts and leads his mount occasionally.

Forced March: The hero presses his mount hard, taking long canters and dismounting to lead his mount only when the animal is desperate for rest.

Movement Penalties

Characters are assumed to be able to make minor adjustments such as ducking behind cover or throwing themselves on the ground with no penalty. The faster a character tries to move, the more involved he is in covering ground and the more difficult it is to undertake other actions at the same time. See TABLE P11: COMBAT MOVEMENT EFFECTS in Chapter 3 of the *Player's Handbook*.

All-Out Movement

A hero fleeing from certain death, or trying to close the range on an enemy who's a long way off, might choose to use all-out movement.

In all-out movement, the hero is allowed to move in every phase—Amazing, Good, Ordinary, and Marginal. He can sprint, run, fly, swim, or even walk if he chooses to do so. However, that's all that the hero can do in that action round. He pays for the privilege of moving in each phase by surrendering his action check. He can't shoot at the villains, attempt a flying tackle of a bad guy getting away from him, use a computer, or display his charm.

To begin all-out movement, a hero must spend an action. For example, if a hero with two actions rolls a Good action check, he might make an attack in the Good phase. In the Ordinary phase, he can declare that he's switching to all-out movement and run or sprint in that phase and the Marginal phase.

All-out movement lasts until the round after the hero decides to stop. He doesn't get any actions in the round during which he stops moving but he can participate in the next action check that comes up and resume the normal sequence of events.

COMBAT

Many heroes live for that noble moment when the opportunity arises to face the evil villain in a trial by combat. Heroes brawl with ruffians in sleazy bars, shoot it out with armed guards in secret bases, and blast their way through hordes of alien monstrosities—combat is one of the most exciting and spectacular features of heroic fiction.

On the other hand, you may ask yourself why you should include combat at all. It's your game, after all, and if you want to stress role-playing and cooperation over confrontation, you should do that.

Before you make that decision, you should consider a few reasons for including combat in your game. First, it gives your players a way to directly confront and defeat the bad guys. Blowing an irredeemable villain into smoking ashes with a righteous fury is a clear way to get to the bottom of things. Maybe it's a simplification, but that's okay. Combat carries the threat of injury or death, giving a vicarious thrill to the player whose hero defies danger and lives to tell the tale. Consciously or sub-

consciously, players want to be as courageous and valorous as the heroes they create.

Your job in the course of a combat scene is to decide what the opposition is up to. Will they surrender meekly, or defy the heroes with guns blazing? Can they flee to fight another day, or will they stand their ground? What else might be going on to complicate the situation—damage to the local area, weather or natural phenomena, the arrival of other characters?

Above all, keep a combat scene moving. Don't let it bog down into bouts of rolling dice. Encourage the players to try to find an edge by having their heroes maneuver for position, use technical skills to juryrig weapons or defenses, or trick their opponents. Use active descriptions and keep the players aware of what's going on around their characters.

Setting Up

When the heroes become embroiled in a combat scene, it's your job to run the opposition. You make the tactical decisions for the villains, roll any attacks they direct at the heroes, and keep track of the damage each villain or creature suffers at the hands of the heroes.

Because you'll need to know the combat-oriented abilities, skills, and equipment of the villains, prepara-

tion is a key ingredient in setting up a fight. Make use of the supporting character templates in *Chapter 6: Supporting Cast* if you don't have the specifics of the villains at hand.

You should also give thought to the type of fight, the surroundings, the likelihood of reinforcements or hazards affecting the course of the battle, and other such details. Fighting on top of a moving train is cool—but what are the chances of knocking someone off the side? You'll present a much more interesting and exciting combat scene if you don't have to stop and look things up. Don't hesitate to eyeball the situation and improvise.

The Combat Scale

Weapon ranges, areas of effect, and combat movement are expressed in meters. A typical combat scene might involve a hero engaged in a shootout with a villain at a range of 10 meters. By specifying a range, you know how quickly characters can close for hand-to-hand combat, whether they're caught in the area of effect from a heavy weapon, and what range modifiers apply for their weapons.

Surprise

The effect of surprise may allow one side to win a free phase of actions for attack, retreat, or even a quick surrender. Naturally, if there's no physical threat to the heroes, or a threat that can't possibly sneak up on them, then there's no reason to see if anyone was surprised—just proceed to the first action round or open the encounter normally.

The Surprise Check

The defense against surprise is the Awareness skill. The specialty skills *intuition* and *perception* reflect the hero's ability to detect danger before it strikes.

Perception is the appropriate specialty skill when the character has a chance to observe or notice the enemy. Hidden traps and ambushes should cause *perception* checks. *Intuition* represents an ability to sense danger when no obvious signs are evident. Enemies using decoys, and misdirection and unexpected attacks cause *intuition* checks.

Every character who stands a chance of being surprised at the beginning of a scene must make an

Awareness check. It's best if you roll these checks for both heroes and villains. It ruins much of the suspense of a scene if the players know their heroes are about to be surprised.

You can always decide that the heroes are surprised without the need for a roll. Maybe they were distracted, or maybe they weren't paying attention.

Surprise Check Modifiers

The subject's Awareness check may be modified to reflect the quality of the surprise attempt—the skill with which the surprise was set up. It can also be affected by the conditions at the time. An ambush expert with favorable terrain could conceivably set up an attack that inflicts a +5 or +6 penalty on the heroes' Awareness checks to detect it. See the "Surprise Modifiers" sidebar for a list of factors that may affect a surprise check.

◆ **Example:** The Gamemaster decides that a hidden sniper in camouflage gear sets up his ambush with a Good success at *Stealth-hide*, causing a +2 penalty to the heroes' Awareness checks. He's in medium cover, which adds a +2 penalty to the heroes' Awareness-perception skill checks, for a total of a +4 penalty.

Blind Meetings

When two groups blunder into each other, or one group barges into a room without knowing what might be waiting for them, it's a blind meeting. Characters from both sides make Awareness checks with the standard modifiers. The group in motion suffers a penalty for terrain, if any; if both groups are moving, there is no terrain adjustment.

Effects of Surprise

At the beginning of a combat scene in which at least one character or creature is surprised, a special procedure is added to the combat sequence: the *surprise phase*. It takes place before any action checks are made. Any character who was surprised doesn't get to do anything in the surprise phase. Any character who avoided surprise is permitted to take an action.

◆ **Example:** The heroes are waiting for a security patrol to come by. They set up a nasty ambush. Since the Gamemaster figures that the patrol doesn't have any real chance to sneak up on the heroes, only the

The Combat Grid

Many Gamemasters find it helpful to control combat with a large mapsheet or diagram that shows the battlefield in detail. A large, washable plastic sheet marked off in 1-inch hexes or squares usually serves the purpose. This gives you plenty of room for miniatures, and allows you to easily determine ranges and areas of effect during a fight.

The best scale for personal combat is 2 meters per hex. For example, a weapon that can fire 8 meters shoots 4 hexes in this scale. In outdoor areas with good visibility, heroes might engage in a rifle duel at hundreds of meters. In such a case, the more appropriate scale might be 10 meters per hex.

Surprise Modifiers

— Stealth skill check —

Critical Failure.....	-2
Failure	none
Ordinary	+1
Good	+2
Amazing	+3

— Setting —

Indoors	+2
Urban	+2
No cover	-1
Light cover.....	+1
Medium cover.....	+2
Heavy cover	+3

— Illumination —

Amazing (bright sunlight) ...	-3
Good (well-lit room).....	-2
Ordinary (average day)	-1
Marginal (cloudy day)....	none
Slight (twilight)	+1
Moderate (moonlight).....	+2
Extreme (total darkness)	+3

— Numbers —

One attacker	+1
Few attackers (1-3).....	none
Several attackers (4-6)	-1
Multiple attackers (7+)	-2

guards have to roll surprise checks. As it turns out, two guards are surprised, but the third isn't.

The heroes open fire in the surprise phase, starting the ambush. The two surprised guards can't return fire in this phase, but the third guard can and does. After all nonsurprised characters have taken their actions, the surprise phase ends, and it's time for the first action check of the scene. In the following round, the surprised guards can act whenever their action checks dictate—if they survived.

Combat Options

Heroes and villains have more options than just standing still and blasting away with their weapons. The best defense against getting shot is placing something large and sturdy between you and the enemy. Heroes can enjoy any advantage of position they can find.

Naturally, a hero has to have an action available in order to move—a hero with a Marginal action check can't move a meter until the Marginal phase comes up. In one phase a hero can, for example:

- Walk a number of meters equal

to his walk rating, with no penalty to other actions.

- Run at his listed rate, suffering a +2 penalty to any other actions he attempts.

- Sprint at his listed rate, with a +3 penalty to any other actions he attempts.

- Swim or engage in all-out movement at his listed rate but take no other actions while moving.

Be generous with movement. For example, if a hero has to stretch one extra meter to reach the elevator doors, you can let him slip through. Even in combat, the game is about fun and roleplaying, not computation of distances. Exact precision isn't necessary.

Making Attacks

An attack uses one of the following broad or specialty skills: Athletics-throw, Heavy Weapons, Melee Weapons, Unarmed Attack, Acrobatics-defensive martial arts, Modern Ranged Weapons, or Primitive Ranged Weapons. To determine what situation die to use for an attack:

- Find the base situation die for the attack skill being used. If a specialty skill is used, the base situation die is +d0; if a broad skill is used, the base situation die is +d4.

- Add any penalties for damage the attacker has received.

- Apply the target's resistance modifier.

- Apply modifiers for the target's range and cover.

- Account for special defensive devices or tactics, such as a deflection harness or dodging.

- Account for offensive tactics, position, advantage, or devices, such as aiming, accuracy of the weapon, or stealth.

That may seem like a long list of things to take into account, but it's unusual for more than two or three of these circumstances to be in play. In many cases, the defender might add +2 or +3 steps to the attack, while the attacker's advantages counter this by -3 or -4 steps. You only need to determine the net modifier to the roll and apply it to the base situation die.

◆ **Example:** While investigating an enemy base, Jack Everstar decides to take out a lazy security guard quietly. He's using his Melee

Weapons-blade skill, which has a base situation die of +d0. The guard has a +1 resistance modifier against Strength-based attacks but he's prone, which gives the attack a -2 bonus. The net is a -1 bonus from the base situation of +d0, so Dave, Jack's player, rolls d20-d4, trying to achieve a result less than or equal to his hero's skill score.

Unarmed Attacks

Unarmed combat is based on one of three specialty skills: Unarmed Attack-brawl or power martial arts, or Acrobatics-defensive martial arts. If a hero doesn't have any of these specialty skills or the Unarmed Attack broad skill, use his or her untrained Strength score. The target of an unarmed attack defends with his Strength resistance modifier.

The base damage for an unarmed character is $d4s/d4+1s/d4+2s$. Heroes with the power martial arts skill, high ranks in the brawl skill, or the Fists of Iron perk do more damage in unarmed combat. High Strength can also increase the damage, as shown on TABLE P9: STRENGTH & DAMAGE on page 40 in the *Player's Handbook*.

Expert brawlers and martial artists have an increased likelihood of knocking out their targets when they get an Amazing result. Refer to "Unarmed Attack Rank Benefits" on page 69 in the *Player's Handbook*.

Overpowering

Sometimes, the best move is to grab and restrain the enemy. To overpower, a hero makes an attack skill check with a +1 penalty.

Weapon Accuracy

Some weapons are more accurate than others; weapon accuracy is an optional rule that reflects this fact. For example, the laser rifle is a more accurate weapon than the flintlock rifle, and the katana is superior to the primitive spear.

To make use of weapon accuracy, look at the weapons tables in the *Player's Handbook*. If a weapon lists a number other than '0' in the "Acc" column, it indicates a modifier to the user's skill check.

Each ally who joins in an overpower attempt in the same phase provides a -1 bonus to the hero's skill check. For example, if a trio of thugs are trying to take down a hero, the attack roll is based on the toughest thug's Unarmed Attack-brawl score with a +1 penalty, but the other two thugs move that to a -1 bonus.

You can choose to set a realistic limit on the number of attackers who can surround a single target, given limitations of space and the size of the target and his attackers.

If the overpower attack is successful, the attacker or attackers have a *hold* on the target equal to the degree of success of the attack. The held character suffers a +1, +2, or +3 penalty to skill checks while held. For example, a Good attack result indicates a Good hold—the held character has a +2 penalty to all actions.

Multiple Attackers

Heroes commonly confront swarms of vile thugs, taking on small mobs single-handedly. When a character is engaged in close-quarters combat with more than one foe, he's at a distinct disadvantage. If circumstances permit, his foes can surround him and attack from several directions.

When a hero fights two enemies, at least one can attempt a flank attack if there's room to maneuver. If the hero is fighting three enemies, one can attack from the rear and one can attack from the flank. See "Modifiers to Unarmed and Melee Attacks."

After three attackers, the bad guys get in each other's way. The fourth attacker has a +1 penalty to his attack regardless of where he attacks from, the fifth a +2 penalty, and the sixth a +3 penalty. No more than six human-sized foes can attack one human-sized character in a single phase.

The common response to fighting multiple opponents is to put your back against a wall or a similar obstacle. This reduces the number of effective attackers to three, or even two if the hero can fight in a narrow corridor.

Once a target is held, the attacker or attackers have a few choices of what to do next.

► **Improve the Hold:** The holding character can attempt to get a better hold in later phases, but he risks losing his hold altogether with a failed attack. An improved hold results in an increased penalty to the target, as noted above.

► **Bum's Rush:** With a second overpower attack, a held character can be dragged, pushed into a cell, or generally moved from where he stands.

► **Maul:** A held character can be strangled or struck with a normal skill check for normal unarmed damage; if the attack fails, the hold is lost.

► **Takedown:** A second successful overpower attack maintains the hold and puts the held character on the ground, where he'll also have penalties for being prone (+2 penalty to his attacks; -2 bonus to attackers). Characters with the defensive *martial arts* skill can attempt a takedown without first gaining a hold.

► **Pin:** A held character on the ground can be pinned with a third overpower attack. These three overpower attacks must be made in consecutive phases in which the attacker can act. A pinned character can't get free until the attacker or attackers choose to allow it.

In order to break a hold, the victim must make a skill check using Unarmed Attack-brawl or power *martial arts*, or Acrobatics-defensive *martial arts* or a feat check using Strength or Dexterity. If successful, the hero escapes the hold; on an Amazing success, the hero can immediately act in the same phase.

◆ **Example:** Jealous of Jack Everstar's fame and good looks, Mad Dog decides to take him down with an overpower attack. This is a normal attack with a +1 penalty, plus any resistance modifier Everstar has. Mad Dog scores a Good hit, which gives Jack a +2 penalty to all skill checks and combat actions he attempts.

In Jack's next action, he attempts a Dexterity feat check to wriggle free, with a +2 penalty for being in a Good hold. He gets an Amazing success, which frees him from the hold—and allows him to spin around and drill Mad Dog with a mass pistol.

Modifiers to Unarmed and Melee Attacks

Situation	Modifier
Attacker	
Rear attack	-2
Flank attack	-1
Off-balance	+2
Higher ground	-1
Prone	+2
Running	+2
Sprinting	+3
Wounded	varies
Target	
Prone	-2
Sitting/kneeling	-1
Resistance modifier	varies
Parries or dodges	varies
Illumination	
Twilight/poor visibility	+1
Moonlight	+2
Total Darkness	+3

Blocking

A character with rank 2 or higher in Acrobatics-defensive *martial arts* can attempt a block. Blocking requires that the character make an Acrobatics-defensive *martial arts* skill check and compare his result to the attacker's result. The character who blocks must achieve a degree of success equal to or better than the attacker's degree of success. If the attacker achieves a worse result, no damage is inflicted by the attack.

A character can only block in a phase when he has an action available; a character who achieves a Good action check result can't attempt to block an attack directed against him in the Amazing phase. Only one attack is countered, and no other actions can be attempted in the same phase in which a character attempts to block.

When a character reaches rank 4 in defensive *martial arts*, he can attempt a *reaction block* whenever an Unarmed Attack is directed against him. The block attempt uses up the character's next available action. For example, a hero who achieves an Ordinary action check result and has 2 actions per round could attempt to block attacks directed against him in the Amazing and Good phases. If a hero who attempts to block an attack has no actions remaining in the current round, he can still make the attempt. As a result, he loses his first

available action in the next round. After this point, no further blocks can be attempted.

Melee Attacks

A hero uses the Melee Weapons broad skill or its *blade*, *bludgeon*, or *powered weapon* specialty skills to make a melee attack. A hero who doesn't have Melee Weapons uses his untrained Strength score. The target of a melee attack applies his Strength resistance modifier to the attacker's skill check.

The damage depends on the weapon the character uses, adjusted by the hero's damage modifier for a high or low Strength score. For the damage caused by a melee weapon, see *Chapter 11: Weapons & Armor* in the *Player's Handbook*.

Cover and range don't come into play in a melee attack. If a character is close enough to swing a sword at someone, he's close enough to deliberately swing around any obstacles and see the target just fine. Only darkness, injury, or extreme weather conditions should hinder a melee attack. See "Modifiers to Unarmed and Melee Attacks."

Dodging

The Acrobatics-dodge skill allows a character to apply penalties to attackers by temporarily increasing his Strength and Dexterity resistance modifiers.

During the first phase in which a hero has an action, he can declare that he's dodging. Dodging takes up the hero's action for that phase and thus one of the hero's actions for the round. It also imposes a +1 penalty on all later actions in the round.

The result of the Acrobatics-dodge check determines the adjustment to the character's resistance modifiers: Critical Failure, -2 steps; Failure, none; Ordinary, +1 step; Good, +2 steps; Amazing, +3 steps. The modifier takes effect immediately, lasting for the current phase and the rest of the round.

It's not possible to combine the effects of a dodge with a parry or a block.

Parrying

Melee weapons prove their value through parrying. A character with a melee weapon or a shield can attempt to parry a Melee Weapons or Unarmed Attack skill used against him (not a ranged attack).

When parrying with a weapon such as a sword or a club, a character makes a Melee Weapons skill check using the appropriate specialty skill for the weapon being used to parry. When parrying with a shield, a character makes an Armor Operation-combat armor skill check. A character who is untrained or has just the broad skill can attempt to parry, but those with ranks in an appropriate specialty skill have a better chance of successfully parrying an attack.

Compare the check result of the parrying character to the attacker's result. The parrying character must achieve a success that's equal to or greater than the attacker's success. If the attacker gets a worse result, then no damage is inflicted by the attack.

A character can only parry in a phase when he has an action available; a character who achieves a Good action check result can't attempt to parry an attack directed against him in the Amazing phase. Only one attack is deflected, and no other actions can be attempted in the same phase in which a character attempts to parry.

When a character reaches rank 4 in a Melee Weapons specialty skill, he can attempt a *reaction parry* whenever a melee attack or unarmed attack is used against him. The parry attempt uses up the character's next available action. For example, a hero who achieves an Ordinary action check result and has 2 actions per round could attempt to parry attacks directed against him in the Amazing and Good phases, but then he'd have no actions remaining for the Ordinary and Marginal phases. If a hero who attempts to parry an attack has no actions remaining in the current round, he can still make the attempt. As a result, he loses his first available action in the next round. After this point, no further parries can be attempted.

A character can use his off-hand weapon or a shield to parry; apply the normal penalties associated with using two weapons at the same time (+2/+4). The character uses the parry

rules described above, though he can make an attack in the same phase in which he parries. If a character using two weapons or a weapon and a shield makes a reaction parry, he must wait until the phase indicated by his action check comes up to actually make his attack, though both skill checks receive the appropriate two-weapon penalties.

♦ **Example:** A skilled character who gets an Ordinary result on his action check could choose to make a parry with his shield in the Good phase at a +4 penalty and attack with his blade later during the Ordinary phase at a +2 penalty.

Weapon Failures

When a character rolls a Critical Failure in a fight, a weapon failure may occur. Weapon failures come in four types. Roll d8 and refer to the table below.

Firearm	Melee	Result
1	1-2	Breakage
2-4	3-8	Dropped
5-7	—	Jammed
8	—	Out of ammo

Breakage: A sword could shatter, a firing pin might break, or a guidance system could dump its load. A hero is allowed a Personality feat check to see if his weapon actually breaks or luckily stays together—on a Failure, the weapon breaks, but on any success it remains intact.

Dropped: It requires an action to retrieve and ready a dropped weapon for the fight.

Jammed: Firearms can jam with a dud cartridge, false charge, or poor action. The hero must clear the jam before he can fire again. To clear a jam, the hero must spend an action and roll a success using the appropriate weapon skill.

Out of ammo: Any weapon with a charge clip or magazine might run out of ammunition or exhaust its charge pack. If this happens before it's supposed to, chances are the hero shot off a couple of extra rounds, the ammo went bad, or the clip was short a few bullets.

You may allow characters with large ranged weapons and the appropriate ranks of Melee Weapons—*bludgeon* or *blade* skill to attempt a parry in times of desperation. Since most rifles aren't intended for close-quarters combat, it's reasonable to apply a +2 penalty to the attempt.

Modifiers for Ranged Weapons

Situation	Modifier
Attacker	
Rear attack	-2
Flank attack	-1
Off-balance	+2
Higher ground	-1
Prone	+2
Running	+2
Sprinting	+3
Wounded	varies
Target	
Prone	+2
Sitting/kneeling	+1
Resistance modifier	varies
Dodges	varies
Cover	
Light	+1
Medium	+2
Heavy	+3
Illumination	
Twilight/poor visibility	+1
Moonlight	+2
Total Darkness	+3
Weapon Mode	
Fire	0
Burst	-1
Autofire	+1/+2/+3
Primitive*	
Short	-1
Medium	+1
Long	+2
Pistol or SMG	
Short	-1
Medium	+1
Long	+3
Rifle or	
Heavy weapon (direct)	
Within melee range	+1
Short	-1
Medium	0
Long	+1
Heavy weapon (indirect)	
Within melee range	+4
Short	+2
Medium	-2
Long	0

* Bow, crossbow, or sling only; flintlocks use rifle or pistol as appropriate

Ranged Attacks

Ranged combat is based on one of four skills: Modern Ranged Weapons, Primitive Ranged Weapons, Heavy Weapons, or Athletics—*throw*. A hero lacking the proper skill must use his or her untrained Strength score (for heavy weapons and throwing) or untrained Dexterity score (for primitive and modern ranged weapons).

Unusually high or low Strength scores modify the damage inflicted with thrown weapons such as spears, knives, or axes; see Table P9 in the *Player's Handbook*. This rule does not apply to thrown grenades.

Automatic Weapons

Some ranged weapons have the ability to fire in *burst* or *autofire* mode. A burst is treated like a normal ranged attack, except that the firing character gains a -1 bonus to his skill check to reflect the greater likelihood of hitting his target. The disadvantage is that the weapon uses ammo faster.

Autofire, on the other hand, can be spectacular. Using a single control die, the hero makes three attacks using three situation dice. The first attack is at a +1 penalty, the second at a +2 penalty, and the third at a +3 penalty. Autofire may strike three different targets, or hammer one opponent for as many as three hits.

◆ **Example:** Raterman blasts away at the hideous alien. After all other factors have been considered, his skill check begins at d20+d4. Since he's chosen full auto, the first

shot is actually a d20+d6. Raterman's player then adds a +d8 and +d12 to his fistful of dice and throws them all at once. The control die applies to all three shots.

Raterman has a skill score of 13 with his SMG. His control die comes up 5, and the other three dice are a 1, 7, and 11 in that order. Thus the total results are 6, 12, and 16. Of these, the 6 is a Good hit, the 13 is an Ordinary hit, and the 16 goes high and misses.

Each hit in an autofire attack is treated separately for the purpose of determining damage. Don't add the damage together before making armor rolls.

A common tactic with autofire is hitting several enemies at once. The targets must be within 6 meters of each other, and the firing character must have a clear line of sight on each. The attacker always computes the situation die of the first shot on the most difficult target he's firing at, and then adds the penalties for the second and third shot from there. In other words, if a hero is shooting at one target with a +4 resistance modifier and another with a +1 resistance modifier, he has to base the burst on the hard-to-hit guy (first shot at a +5 step penalty) and roll the second and third shots accordingly (at a +6 and a +7 step penalty, respectively).

Area-Effect Attacks

Another special type of ranged attack is the area-effect attack. Weapons that deliver explosive warheads don't damage only the point of im-

Friendly Fire

Shooting into a close-quarters fight is dangerous. When a hero uses a ranged weapon to attack an opponent embroiled in melee combat or unarmed combat with an ally, he can choose to restrict his fire, taking a +2 penalty to his skill check. On a successful result, he hits the intended target. If he misses, he doesn't strike anyone else.

If the character doesn't restrict his fire, a normal skill check is made (without the penalty)—but if it misses, a new skill check is immediately rolled against a randomly determined character standing next to the original target. If the circumstances warrant, you can declare that one particular character is in danger of being struck by the errant shot.

If an enemy is specifically using a friendly target as a shield—as in many hostage circumstances—a called shot is necessary to strike the enemy, raising the penalty to +4. If the attack misses, a second attack is immediately rolled (without the penalty) to see if the hostage is hit.

Area-effect weapons are particularly dangerous, since they don't discriminate between friend and foe. It's not a good idea to throw a grenade into a room where allies are brawling. Using a flamethrower to attack a pit bull chewing on an ally's leg is just as bad. An area-effect weapon targets any character who happens to be within its blast radius.

Hitting the Deck

Any character caught within the blast of an area-effect weapon may attempt an Acrobatics-dodge skill check to dive behind cover or throw himself flat when the weapon goes off. If the hero succeeds, he lessens the damage by one category—Amazing to Good, Good to Ordinary, or Ordinary to none. Like any dodge, hitting the deck costs an action. See “Dodging,” above.

pact, but can also injure creatures in the general vicinity. Area-effect weapons include grenades and bantam rockets.

When a character attacks with an area-effect weapon, he first chooses an aiming point. This can be an enemy, or a point on the ground. If the hero aims at a character, the target's resistance modifier applies. If he lobbs the attack at a point on the ground, no resistance modifier applies. Aiming at the ground has the disadvantage that targets may move out of the area of effect during the phase.

The result of the skill check determines how close to this aiming point the weapon lands or strikes—ground zero for the area-effect attack.

Most area-effect weapons miss by a distance determined by the range and the attack roll indicated on TABLE P20: ACCURACY BY RANGE. For example, a hero who throws a grenade at medium range and gets an Ordinary success still misses his target by 2 meters. Usually, the exact fall of the weapon is a random result determined by use of the scatter diagram at right.

Under unusual circumstances the Gamemaster can select the impact point of the weapon. For instance, if a hero is trying to throw a grenade into the narrow firing slit of a reinforced bunker, you might decide that any miss bounces off the bunker's face and blows up just outside. Firing a guided missile into a forest is likely to result in the destruction of a tree, not the target.

Once you've determined how far from the target the weapon lands, and in what direction, you can see if any other characters or objects besides the actual aiming point might be affected by the attack.

TABLE P20: ACCURACY BY RANGE*

Skill Check Result	Distance from Target		
	Short	Medium	Long
Critical Failure	4 m	8 m	12 m
Failure	2 m	4 m	6 m
Ordinary	on target	2 m	4 m
Good	on target	on target	2 m
Amazing	— always on target —		

* For thrown objects or indirect fire weapons

The damage caused by an area-effect weapon is determined by the specific weapon and the distance from the detonation point. Therefore, all area-effect weapons have a damage rating graded on the number of meters they miss by. For example, the fragmentation grenade inflicts Amazing damage ($d6+2w$) to any target within 2 meters, Good damage ($d4+2w$) to any target within 6 meters, and Ordinary damage ($d4w$) to any target within 10 meters of its detonation point. This damage is not cumulative; only the highest damage value is applied.

Point Blank

You may allow characters to receive a bonus to attacks from extremely close range. Point-blank shots occur at a range of less than 1 meter. Pistols, rifles, SMGs, and heavy weapons (direct) receive a +3 bonus for shooting in this range.

Ammo Expenditure

Players should keep track of how much ammo their heroes use up. Normal fire expends a single round for each attack; burst fire expends one burst, or three rounds; and autofire three bursts, or nine rounds, every



phase. All firearms have a clip size as noted in *Chapter 11: Weapons & Armor* in the *Player's Handbook*. For example, an 11mm charge rifle holds enough ammunition for 30 single shots or 10 bursts before its magazine is emptied.

When a clip or charge cartridge is emptied, it takes one action for the hero to replace it. Optionally, the hero can change a clip and shoot in the same phase at a +2 penalty. Characters who have achieved rank 3 in Modern Ranged Weapons—SMG can change a clip and fire a submachinegun in the same round without penalty.

Revolvers and derringers don't have clips—each bullet must be loaded by hand. Reloading the weapon requires a phase, and no shots are allowed.

Finally, some weapons must be reloaded after every shot. Flintlocks

and crossbows are good examples. One action spent reloading allows one shot before the hero must reload the weapon again.

Special Combat Conditions

Fighting in chest-deep water is a lot different from fighting in a boxing ring. Heroes routinely find the strangest places to get into combat, with numerous hazards, restricted spaces, and lousy footing hindering them.

Poor Terrain

Heroes are efficient all-terrain vehicles, able to scale 90° slopes, swim wide rivers, and leap from boulder to boulder in a jumbled rockfall. Even so, terrain conditions can slow even the most determined athlete.

Varied terrain (sand, light forest,

or jungle) reduces a character's movement rates—sprint, run, or walk—by 50%. A hero with a sprint of 20 could only sprint at a rate of 10 meters per action in Varied terrain. Rugged terrain reduces movement even more. See TABLE G11: TERRAIN IN COMBAT.

The chief effect of a patch of bad terrain is to keep characters under fire longer than normal. A charging enemy might normally cross a clearing in a single round, limiting the heroes to one or two shots to drop him—but if that same enemy has to slog through a slimy morass, he might take several rounds to cross the open space, during which time the heroes can easily pick him off.

Limited Visibility

You can't shoot at something you can't see. On a moonless night, a human can make out large objects

Supporting Cast Action Checks & Teamwork

Sometimes a scene can contain so many supporting characters that the Gamemaster has to roll and keep track of a dozen or more separate skill checks and action checks. Here are some methods to help you keep a scene under control—at least from a game mechanic point of view.

Action Checks

In a scene that's full of heroes and your supporting cast each making action checks and taking actions, the simplest option is to use a supporting cast member's reaction score. This score gives the phase during which the character or creature first acts (its automatic action check result) and the number of actions that it can take in the round. See the sidebar on "Reaction Scores" earlier in this chapter.

Your second choice is to select a single member of the supporting cast during the scene. This individual can be either the leader of a group of characters or simply a representative of them. Roll a single action check for the supporting cast, using this individual's action check score. All the supporting cast members will act in the same phase or phases.

Another choice is to make action checks for each member of the supporting cast. It's the most realistic, but also the most time-consuming.

Use or combine these methods as you see fit. You can use reaction scores for thugs and other minor villains, but roll normal action

checks for special creatures, villains, or allies.

Teamwork

Sometimes a mob of supporting characters will—purposely or by accident—try to do the same thing at the same time. The end result is a lot of dice being rolled to determine a single effect. The teamwork rules here reduce the number of dice rolls made in a phase, and can be used in every phase that the team—or mob—stays together and works toward the same end. In situations where you determine that a mob or team can use coordinated or uncoordinated teamwork, use the following rules.

► **Uncoordinated:** An uncoordinated effort requires nothing more than sheer numbers. When a mob accidentally works together to achieve a single goal, make a single skill check. Use the appropriate skill score of the character in the mob with the highest Personality score, as this is the character the mob follows. The character's skill check is modified by the number of characters working together, as shown on the table below. Use

common sense when deciding how many people can actually work together to accomplish a single task: twenty people might be able to force open a pair of huge doors, but no more than six individuals should be able to surround and attack a single character.

In combat, after making the modified skill check, the mob gets to roll damage against its target. Damage inflicted by a mob is always Ordinary, but the degree of success achieved determines how many damage rolls to make.

Uncoordinated teamwork isn't pretty, but actions benefit from the crush of numbers. An uncoordinated team might rush a locked door, stampede over a fallen hero, or attack a single object or person.

Number of Characters	Modifier to Skill Check	Damage Rolls per Success
3-6	-1 bonus	1/1/2
7-12	-2 bonus	1/2/2
13-20	-3 bonus	2/2/3
21-30	-4 bonus	2/3/3
31-40	-5 bonus	3/3/4
41+	-6 bonus	3/4/4

TABLE G11: TERRAIN IN COMBAT

Terrain	Movement Effect	Example
Smooth	none	firm sand, earth, light brush
Varied	½ normal	knee-deep water, loose sand, jungle, moving uphill
Rugged	¼ normal	waist-deep water, deep snow or mud, thick jungle, steep slope

such as houses and trees at 50 meters away. With a bit of light, visibility can extend to a kilometer under such circumstances. Total darkness, on the other hand, features a cloudy, moonless night with rain or

blowing snow, or an interior room with no lights on. Penalties for limited visibility in combat are shown on TABLE G12: VISIBILITY IN COMBAT, on the following page.

Special Tactics

The basics of the combat system are easy, but advanced players may want more choices for special situations. Some of these are introduced in the *Player's Handbook*, and a few more are here. You have complete discretion over whether or not any special tactics can be used.

Aiming

A character making an attack with a ranged weapon or a direct fire heavy weapon can spend an action aiming before the attack is made. Aiming provides a -1 bonus to the next attack, provided the hero makes the attack in the next phase he is entitled to act.

It's not possible to aim when using burst or autofire modes.

Supporting Cast Action Checks & Teamwork (cont.)

◆ **Uncoordinated Teamwork Example:** A mob rushes out of the space station restaurant, fleeing a gang of weapon-wielding space pirates. Unfortunately, Kalin Starborne is right in the mob's path! There are about twenty-five people in the charging crowd (a -4 bonus), and the Gamemaster decides that the hero's in danger of being stampeded. The member of the crowd with the highest Personality score is considered the mob's leader for this action; the Gamemaster uses her Unarmed Attack-brawl score of 12. Kalin gets to apply his Strength resistance modifier to the roll (a +2 penalty). This gives the mob a -2 bonus, so the mob rolls d20-d6 to achieve a number that's equal to or less than 12.

The roll is 7, an Ordinary result; the mob now rolls three Ordinary Unarmed Attack damage checks (d4s × 3), which are applied separately to Kalin (who can make an armor roll against each application of damage).

► **Coordinated:** A coordinated effort requires a lead character. The lead character can direct a number of individuals based on the rank he has in Leadership-command, as shown on the table below.

Leadership Skill	Max Number of Characters
Untrained	2
Broad	4
Command 1	6
Command 4	8
Command 8	12
Command 12	20

The effect of teamwork is to provide a modifier to the lead character's skill check using whatever skill is most appropriate to the task at hand. If the lead character makes a successful Leadership-command check in the phase before the teamwork begins, he can instead direct another team member to make the skill check; this is presumably someone with a better score in the appropriate skill.

By concentrating their efforts in a directed manner, the coordinated team has a better chance for greater success than a character working alone. Coordinated teamwork appears as a volley of weapons fire aimed at a single target, a systematic approach to a given problem, or a concerted effort to accomplish a single task.

In combat, after making the modified skill check, the coordinated team gets to roll damage against its target. Damage inflict-

ed by a coordinated team is always Ordinary, but the degree of success achieved determines how many damage rolls to make.

Number of Characters	Modifier to Skill Check	Damage Rolls per Success
2	-1 bonus	1/2/2
3-4	-2 bonus	2/2/3
5-6	-3 bonus	2/3/3
7-8	-4 bonus	3/3/4
9-12	-5 bonus	3/4/5
13-20	-6 bonus	4/5/6

◆ **Coordinated Teamwork Example:** The space pirate captain and his five henchmen spot Kalin staggering into the restaurant. The captain, who has Leadership-command 1, directs his men to aim and fire at the hero. Six coordinated attacks provide a -3 bonus, while Kalin's Dexterity score provides a +1 penalty. Using the captain's Modern Ranged Weapon-pistol score of 15, the captain must roll 15 or less on d20-d6.

The roll is a 6, a Good result, so the pirates' teamwork pays off. Roll three Ordinary damage rolls, applying each separately to Kalin (who is entitled to make an armor roll against each application of damage).

TABLE G12: VISIBILITY IN COMBAT

Visibility	Combat Penalty	Example
Slight	+1	moonlight
Moderate	+2	starlight, dark building
Extreme	+3	total darkness, underground

Called Shot

A hero who wants to hit a very precise target can declare a called shot before he makes his skill check, adding a +4 penalty. Called shots can be used for a variety of special purposes, detailed below. It's not possible to use burst or autofire with a called shot.

► **Disarm:** A called shot can strike a weapon out of an opponent's hand in melee combat or in ranged combat. If the shot is successful, the target is disarmed but suffers no damage. Usually, a disarmed character can retrieve his weapon with his next action.

► **Dead-Eye Shot:** A called shot can place a shot or a melee strike exactly where it will hurt the most. The dead-eye shot automatically increases the degree of success by one grade, if it hits: An Ordinary success becomes Good, and Good becomes Amazing. Amazing results are unaffected, and a miss is still a miss. Dead-eye shots are particularly useful for getting solid hits on heavily armored enemies.

► **Equipment Damage:** A called shot can damage something another character is holding or carrying. For example, a hero might decide to riddle the enemy's data slate with bullets to ensure that stolen files don't survive the fight. Naturally, this subjects the object in question to an attack. See "Property Damage" later in this chapter.

► **Style Shot:** A called shot can strike an opponent with an attack that inflicts no damage except humiliation. It singes clothing with a laser beam, cuts hair with a sword, removes a button from a suit, or performs some other obnoxious display of superiority. Usually this gets people mad—or scared. A Failure on a style shot embarrasses the attacker instead, without doing physical damage to anyone.

► **Trick Shot:** The hero attempts some outlandish feat of marksman-

ship, like severing a rope at 100 meters, throwing a knife to knock a car into gear, or any similar feat. If the shot is really ludicrous, increase the penalty to +6 or more.

Charge

A common tactic for entering a hand-to-hand fight is a charge. A charging hero ignores the penalties associated with attacking while running and gains a -2 bonus to his skill check. On the downside, his opponents gain a -2 bonus to strike him during his heroic dash. Once a character is engaged in melee combat with the enemy, it's impossible to charge again until the hero is free and clear of the fight.

Suppressive Fire

Suppressive fire is intended to force the enemy to keep his head down and ruin any shots he's taking. It's especially useful for protecting an ally who's trying to cross open ground. When a character declares that he's using suppressive fire, he makes a normal skill check, but instead of inflicting damage, the result of the check inflicts a +1, +2, or +3 penalty to any ranged attacks that the target makes during this phase.

Suppressive fire with an automatic weapon is particularly effective, since the character laying down the covering fire can affect the attacks of up to three enemy characters.

The effects of suppressive fire aren't cumulative. The enemy's skill check is only affected by the best suppressive fire result used against him, not the sum of all suppressive fire.

Suppressive fire has a different effect on targets that aren't aware of, or don't care about, the threat. Many animals won't be deterred unless they are injured, and an enemy in a superior position (such as inside a body tank) is unlikely to keep his head down because someone's shooting at him with a pistol. For tar-

gets such as these who opt to ignore suppressive fire, normal damage is rolled for the result indicated.

◆ **Example:** Mad Dog unleashes his 11mm charge rifle in autofire mode, laying down suppressive fire on three enemies to allow Everstar to reach the computer console. Mad Dog rolls 1 Good success and 2 Ordinary successes against the targets. Normally, this would give a +2 penalty to the first target and a +1 penalty to the other two. The last target, however, decides to ignore the suppressive fire. This enemy doesn't have the +1 penalty on his shot, but does suffer an Ordinary hit from Mad Dog's rifle.

Sneak Attacks

Heroes with the Stealth skill (or using the skill at the untrained level) can maneuver for a sneak attack during a fight. The situation must present available cover or obscurity, or the victim must be approached from the rear. For example, a stealthy character could walk right up to his victim in a crowd, creep up through underbrush, or simply sneak up on him when the fellow is looking the other way. You can choose to disallow any sneak attack in which the hero doesn't have the opportunity to get out of his target's sight before striking.

The hero's Stealth skill check determines his success in maneuvering into position. The result of the check provides a bonus to the first attack: Ordinary, -1; Good, -2; Amazing, -3. The hero can execute his sneak attack with a melee weapon, an unarmed attack, or a ranged attack.

Threaten

Instead of making a normal attack, a character can threaten the enemy with his weapon. The hero makes a skill check, but instead of inflicting damage he has threatened the target. In any subsequent phase or round, he can automatically strike before the threatened target, whether or not he has an action available and regardless of his action check. The damage of the attack is determined by the initial skill check.

The threatening character must be within striking distance if using a melee weapon or within maximum range if using a ranged weapon. The threat is broken if the threatening character uses an action to do any-

thing other than keep an eye on the covered character, or if something or someone gets between the two characters.

Only the most fanatic or stupid enemies ignore the fact that they're threatened by a character. If appropriate, you can require a Will feat check to see if the threatened character keeps on fighting.

Attacking with Two Weapons

When a hero employs two weapons at the same time, he makes two separate skill checks. For example, a hero wielding two pistols makes two separate pistol shots each phase he shoots. However, using two weapons at once is tricky; the character suffers a +2 penalty with his primary hand, and a +4 penalty with his secondary hand.

If a character is Ambidextrous (see *Chapter 5: Perks & Flaws*), the penalty is negated for the primary hand, and drops to +2 for the secondary hand.

A good tactic to use when fighting with a melee weapon in each hand is to make attacks with the primary weapon, but reserve the secondary weapon for parries. This allows the skilled character to make a parry (with a penalty for secondary hand use as above), without spending an action.

DAMAGE

When a character scores a hit with a skill check, the degree of success achieved dictates the amount and type of damage. Scoring an Amazing hit means more serious damage than scoring a Good or an Ordinary hit. The damage inflicted by any particular weapon is listed in *Chapter 11: Weapons & Armor* in the *Player's Handbook*.

Modifiers to the attack skill check affect damage indirectly. Shooting at someone with a -2 bonus is much more likely to result in an Amazing hit than shooting at someone with a +2 penalty. In the case of a severe penalty, the attacker will be lucky if he scores a hit at all.

Primary and Secondary Damage

The damage listed for each weapon in the *Player's Handbook* is referred



In a body tank, you're never outnumbered

Amazing Damage

A character who suffers Amazing damage—either from an Amazing result by an attacking character or creature or from being in the Amazing radius of an area-of-effect weapon such as a grenade—must make a Stamina-endurance check. Remember to apply any penalties due to excessive stun, wound, or mortal damage (see “Effects of Damage” later in this chapter), including those penalties caused by the Amazing result itself.

If the result of the Stamina-endurance check is a Critical Failure or Failure, the hero is knocked out. Mark off all stun boxes. The character is unconscious for at least the rest of the current round and all of the next. See “Stun Recovery” later in this chapter.

Characters wearing heavy armor (such as body tanks or powered attack armor) are immune to this effect. If the armor worn degrades the damage (see “Firepower and Toughness” later in this chapter), the well-protected character doesn’t need to make a Stamina-endurance check.

You can use this rule in other situations—such as dangerous hazards or long falls—to determine if characters suffering large amounts of damage remain conscious.

to as *primary damage*. Primary damage can cause a side effect known as *secondary damage*. Any time a character suffers wound damage, he also suffers stun damage equal to one-half the number of wounds (round down). When a character sustains mortal damage, he also suffers stun and wound damage equal to one-half the number of mortals (round down).

◆ **Example:** Everstar makes a skill check of d20–d4, comparing the result to his Melee Weapons–blade skill score of 14. He rolls a 7, for a Good result. A broadsword inflicts d6+2 wounds on a Good hit. Everstar rolls, and the target suffers 6 points of wound damage. As a side effect, the target suffers 3 stun points of secondary damage.

Armor

Armor is a standard part of the genre in many futuristic settings. Armor protects a character by stopping some or all of the primary damage inflicted by a successful hit. Armor isn’t effective against secondary damage. (Skill ranks in an Armor Operation specialty skill in conjunction with armor can allow a hero to absorb stun points, including those suffered through secondary damage. See the skill description.)

Most types of armor have different protection ratings against different types of attacks. The *low impact (LI)* rating indicates how well the armor protects against muscle-powered weaponry, such as swords, maces, and bows. The *high impact (HI)* rat-

ing reflects the armor’s ability to stop high-velocity physical attacks like bullets and shrapnel. Finally, the *energy (En)* rating describes the armor’s toughness against nonphysical attacks. The ratings of each armor are found in Chapter 11: Weapons & Armor in the *Player’s Handbook*.

◆ **Example:** Everstar’s sword inflicted 6 wounds and 3 stuns to the guard, but the fellow happened to be wearing a battle vest. This stops d6–3 hits against a low-impact weapon like a sword. The Gamemaster rolls and determines that the vest absorbs 2 of the 6 wounds. The secondary stun damage is not affected. In total, the guard takes 4 wounds and 3 stuns from the attack.

Firepower and Toughness

Firepower and toughness present a means to compare the damage resistance of large and armored targets with the damaging capability of powerful weaponry.

All weapons have a firepower: Ordinary, Good, or Amazing. Most personal weapons are of Ordinary firepower, and many heavy weapons have Good firepower. Large vehicular weapons and spaceship weapons have Amazing firepower.

Armor and objects have a toughness rating. Humanoid species, most personal armor, and portable objects have Ordinary toughness. Vehicles, buildings, and a few types of personal armor (such as powered attack armor and body tanks) have Good toughness. Tanks, fortified buildings,

and spaceships have Amazing toughness.

When an object or armor of Good toughness is struck by a weapon of Ordinary firepower (like a common pistol or sword), the damage degrades. Mortal damage becomes wound damage, wound damage becomes stun damage, and stun damage is ignored. This effect occurs before any armor rolls or secondary damage take place. After the damage degrades, the armor then makes a normal roll against the new primary damage, and might negate some or all of this. Secondary damage is based on the new primary damage.

The effect is identical when an object or vehicle of Amazing toughness is struck by a weapon of Good firepower.

When an object of Amazing toughness is struck by a weapon of Ordinary firepower, the damage degrades twice. Mortal damage becomes stun damage, and wound and stun damage is ignored.

When a weapon’s firepower equals or exceeds the toughness of its target, damage doesn’t degrade.

Upgrading Damage?

No standard rule exists to consider upgrading damage when a weapon’s firepower exceeds the toughness of its target. Generally, such a rule isn’t necessary; heavy personal weapons do more damage than other personal weapons.

If an opportunity arises when you think that a weapon of excessive firepower should do more damage to the target, apply the following rule. If the weapon’s firepower exceeds the target’s toughness by one category (Amazing weapon against Good toughness, for example), consider all Ordinary hits to be Good hits and all Good hits to be Amazing hits, for the purposes of rolling damage. A miss is still a miss, and Amazing hits aren’t changed. If the weapon’s firepower exceeds the target’s toughness by two categories (Amazing firepower against Ordinary toughness), all hits automatically do Amazing damage.

Hence, an Ordinary weapon (such as a pistol) doesn't degrade when firing at unarmed or lightly armored personnel; a Good weapon doesn't degrade against heavily armored personnel or the average vehicle; an Amazing weapon doesn't degrade against tanks or spaceships.

The armored target can still be brought down by heavy and accurate small-arms fire, but it takes time. It's much more effective to find a weapon of Good or Amazing firepower when dealing with tougher objects.

♦ **Example:** Imagine Jack Everstar attempting to stab a guard in a body tank. Since this armor has Good toughness, the 6 wounds Everstar inflicts degrade to 6 stuns. Now the guard makes an armor roll. Against low impact damage, the body tank stops $2d4+1$ hits—in this case, a total of 6 hits. So, the armor blocks the 6 stuns of Everstar's sword thrust. Everstar would need an Amazing success with lots of mortal damage to have a good chance against a body tank with his sword.

Realizing the hopelessness of the situation, Everstar makes a judicious retreat and returns with a plasma gun. He scores an Ordinary success with his attack, inflicting 7 wounds on the armored guard. Since the plasma gun is considered to be a weapon of Good firepower, these 7 wounds don't degrade. The guard's armor stops $2d4+1$ hits (this time the result is 5) and thus negates most of the primary damage—but the 3 stuns of secondary damage get through and shake up the guard. Everstar is making progress.

Special Uses

You can use the rules for firepower and toughness for aliens or intelligent machines as well. For example, an alien might have Good toughness, downgrading Ordinary firepower used against it due to its extraordinary resilience. It's possible for an extremely tough alien to shrug off normal weapons fire.

Creatures of extreme durability might have Amazing toughness. These should be quite rare, since a party of heroes armed with personal weapons could only hope to do stun damage to such a monster, and even then they'd need to roll hits inflicting mortal damage.

Damage resistance doesn't have to apply across the board to all kinds of attacks. Some creatures may be

resistant to one type of damage—low impact (LI), high impact (HI), or energy (En)—but affected normally by the other categories. You can design opponents who are resistant to all kinds of damage except one very specific type of weapon, such as sonics, gravity devices, or even silver bullets.

A few creatures or objects might be immune to damage of some types. A lake can't be hurt by impact damage, although it's conceivable that an energy weapon could boil off its water. Use common sense, but remember that heroes should have a chance to inflict damage against the villains.

Effects of Damage

A character's or creature's durability rating is divided into four kinds of damage: stun, wound, mortal, and fatigue. Most humans and members of humanoid species possess a number of stun and wound points equal to their Constitution score and a number of mortal and fatigue points equal to half their Constitution score (round up). Characters can lose all of their stun and wound points and still survive, but when a hero exhausts his mortal points, he dies.

There are any number of ways for your heroes to accumulate damage. The most common is through combat; every time an enemy successfully strikes a hero, the hero suffers damage based on the weapon the villain is wielding, minus the effectiveness of any armor. Heroes can also be damaged by dangerous environments, falls, traps, or accidents. Finally, heroes might expend fatigue points by engaging in strenuous activity such as sprinting or forced marches.

Stun Damage

Battering, cuts and scrapes, bruising, and exposure to the elements are represented by stun damage.

When a hero suffers stun damage that exceeds half his total stun rating, you may choose to apply the optional rule for the hero being dazed. He suffers a +1 penalty to all actions due to pain and weariness.

When a hero runs out of stun points, he's knocked out. Characters are occasionally subjected to addi-

tional stun damage (heavy stun) after they run out of stun points. For each 2 points of stun damage a knocked-out character sustains from a single attack, he suffers 1 point of wound damage.

Stun Recovery

Stun damage automatically disappears at the end of a scene. Use of Medical Science—*treatment* or Knowledge—*first aid* can remove stun damage during a scene and can also return consciousness to knocked-out characters. See the appropriate skill descriptions.

A hero who doesn't receive medical attention remains unconscious for the remainder of the round he was rendered unconscious, and all of the next round as well. Thereafter, an unconscious hero can make a Resolve—*physical* resolve check every round to recover. Success brings consciousness, and the degree of success determines a number of stuns recovered: Ordinary, 2 stun points; Good, 4 stun points; Amazing, 6 stun points. Characters can't take any actions in the same round they recover; all they do is wake up and take stock of their surroundings.

Wound Damage

Punctures, burns, serious cuts or slashes, fractures, and widespread systemic injury are included in the category of wound damage.

Every 2 points of wound damage a character suffers also causes 1 point of secondary stun damage. Secondary damage bypasses armor: see "Armor" above.

When a hero suffers wound damage that exceeds half his total

It's Your Game

If you like the idea of blooded and broken heroes fighting on until the spark of life is completely snuffed out, or if there is a special circumstance where you want to allow a hero to keep on fighting, allow the hero with all of his stun or wound boxes filled to make a Resolve—*physical* resolve check to stay conscious. Of course, damage suffered at this point will overflow to the next damage category.

wound rating, you may choose to apply the optional rule for the hero being dazed. He suffers a +1 penalty to all actions due to shock, blood loss, and extreme pain. This is cumulative with any other penalties for damage.

When a hero exhausts his wound points, he's knocked out. For every 2 points of additional wound damage (heavy wound) suffered by the character in a single attack, he sustains 1 point of mortal damage.

At the end of a scene in which a character suffers wound damage, a fatigue check is rolled (see "Fatigue Damage" below), regardless of whether the damage was healed during the scene.

Wound Recovery

Unlike stun damage, wound damage does not disappear at the end of a scene; it lasts until a hero receives medical treatment or has a chance to heal naturally over days or weeks.

Medical Science—*treatment* and surgery can heal wound damage. See the appropriate skill descriptions. Without medical treatment, wounds take time to heal. Each week, the hero is allowed to make a Resolve—*physical* resolve check. A number of wound points are recovered based on the skill result: Critical Failure, condition worsens and 1 additional wound is suffered; Marginal, 1 wound recovered; Ordinary, 2 wounds; Good, 3 wounds; Amazing, 4 wounds.

The unmodified skill check assumes a state of minimal activity that places few stresses on the hero's body. If the hero restricts his activity to a hospital bed or a state of complete rest for the week, the check receives a -2 bonus. If he engages in normal activity, the check receives a +2 penalty.

If a character is unconscious because all of his wound points have been lost, he can't regain consciousness until at least 1 point of wound damage is healed.

Mortal Damage

Mortal damage represents severe injuries to vital parts of the body—a bullet in the chest, a knife in the kidneys, third-degree burns, and other nasty stuff.

Every 2 points of mortal damage a character suffers also causes 1 point of secondary stun damage and 1

point of secondary wound damage. (Secondary wound damage doesn't lead to additional secondary stun damage.) Secondary stun and wound damage can cause knockout as noted above. Armor can't absorb secondary damage.

Each point of mortal damage causes a +1 penalty to all actions or checks (including Stamina—*endurance* checks). For example, a hero who has suffered 3 points of mortal damage has a +3 penalty to do anything. This is cumulative with the penalties for excessive stun and wound damage.

A character or creature that has suffered any amount of mortal damage is considered to be dying. At the end of the scene, a Stamina—*endurance* check is made. The result of the check determines if additional mortal damage accrues: Critical Failure, 2 additional points of mortal damage; Failure, 1 additional point of mortal damage. On any success, the character suffers no additional mortal damage. Following the end of the scene, the dying character must continue to make Stamina—*endurance* checks every hour with similar effects.

If all of a character's mortal boxes are marked off, he dies.

At the end of a scene in which a character suffers mortal damage, a fatigue check is rolled (see "Fatigue Damage" below).

Mortal Recovery

Mortal damage doesn't naturally heal; it can only be healed by the use of a medical skill. Successful use of Knowledge—*first aid* or Medical Science—*treatment* can stabilize the dying character and reduce the need for Stamina checks to once every day. Medical Science—*surgery* is required to actually improve the dying character's condition and heal mortal damage.

Fatigue Damage

Fatigue damage represents exhaustion. It may be caused by marches and overload movement, heavy labor lasting longer than 10 minutes, exposure to certain harsh environments, or suffering wound or mortal damage during a combat scene. When a hero engages in fatigue-causing activity, a Stamina—*endurance* check is rolled. A Critical Failure result indicates that the character suffers 2

points of fatigue damage; a Failure indicates 1 point of fatigue damage. Any success indicates that no fatigue damage is suffered as a result.

Fatigue checks are usually made at either the end of the activity, the end of the scene, or once per time unit for overland movement or labor. Adjust the interval between fatigue checks as you see appropriate for the severity of the activity or situation. To reflect the difficulty of continued labor or exposure to fatigue-causing activity, you may decide that each Stamina—*endurance* check after the first is made with a cumulative +1 penalty.

Each point of fatigue damage point causes a +1 penalty to all actions or checks (including Stamina—*endurance* checks). This is cumulative with the penalties for excessive stun, wound, and mortal damage.

When a hero exhausts his fatigue points, he must make a Resolve—*physical* resolve check to avoid falling unconscious.

Fatigue Recovery

Recovery from fatigue damage can only begin after a cessation of fatigue-causing activity or exposure. While a character is at rest, he or she can make a Resolve—*physical* resolve check every hour. The result of the check determines the number of fatigue points recovered: Critical Failure or Failure, none; Ordinary, 1; Good, 2; Amazing, 3.

At your discretion, you may assume complete recovery with a day's rest or a dramatic interlude of sufficient time.

Death

No game mechanic exists for restoring life to the dead. Resurrection isn't available as a standard option. You can make character death in your game as final as you want it to be. In a realistic or low-tech campaign, heroes will occasionally die.

This isn't entirely bad. After all, players won't feel like their characters are at risk unless they think that their characters can be killed by the bad guys. A game without risk—or at least the illusion of it—isn't much of a game. In order for the players to be entertained and challenged, they have to believe that their heroes don't have guarantees of glorious victory and a stroll into the sunset.

On the other hand, players form

deep and personal attachments to their characters. No one enjoys reading of a beloved fictional character's senseless death, and your players are likely to feel the same way about their characters. Indeed, the better your game, the more attached to their characters the players will become.

The risk of character failure and death is accepted in a story—but meaningless death is resented by most players.

Think carefully before you allow a random fall of the dice to kill a hero in an insignificant scene. If a hero has gotten in an unfortunate spot through sheer bad luck, it's okay for you to pull your punches.

Cheat. Cheat big and cheat often. It's your campaign and your story; as long as the clandestine assistance benefits the heroes and the interests of a good story, you're doing right. Good ways to cheat include a careless reading of the dice—maybe you don't notice that it's a Good instead of an Ordinary hit. Or introduce a distraction or difficulty for a villain that limits his effectiveness—running out of ammo, for example. Maybe the villain just happens to fail his Stamina check at a critical moment. Use your discretion.

If the dangers or opposition in your game prove too much for a hero and result in his unfortunate demise, try to wring meaning from his sacrifice. Noble selflessness to save a comrade or take out a terrible danger is not a bad way for a hero to go out. Let the player feel like his hero made a difference while he appeared in the imaginary pages of the story.

Coup de Grace

A bloodthirsty character can automatically inflict an Amazing hit against a helpless victim. This includes targets that are tied and bound, paralyzed, or unconscious. The attack requires an action, and the attacker must be within personal range of his intended victim. If the attacker uses a firearm, the victim must be only a few meters away, although the circumstances may vary. The victim's armor may still absorb some or all of the damage.



Countdown to catastrophe

Resuscitation?

All that said, medical technologies may be available in your campaign that can revive a dead character. This should not be a routine occurrence.

It might only be possible in the finest medical facilities, and even then there may be some definite limits to the capabilities. Time might be of the essence; the longer a character is dead, the more his tissues break down, and the less likely it is that his body will be able to support life again. A limit of an hour or two hours is pretty reasonable in this scenario.

Unusual circumstances of death might open the door to the possibility of resurrection. For example, the phenomena of cold-water drowning has been well documented. In some cases, people have survived immersions of close to an hour, although it's certainly no guarantee—don't try it at home. Freezing in super-cold environments, death by weird alien toxins, or exposure to unearthly energies might allow the possibility of a character's return to life.

In general, a hero or his comrades should have to pay for a second chance at life. This is a great plot de-

vice waiting to be exploited—what might the hero's mysterious alien benefactors want in exchange for this restoration of life? How might the experience change the character?

Don't treat a brush with death as mundane—the heroes wouldn't!

Property Damage

Heroes armed with high-powered energy weapons, powered armor, and demolition charges tend to rearrange landscape whether they mean to or not. If you've got a plasma gun, who needs a door? Any object or material can be described by three properties: its durability, its toughness, and its armor.

Durability

For objects and vehicles, *durability* is a score equal to the object's mortal rating. Just how much damage can it sustain before it's blasted into ashes? Like living creatures, inanimate objects have *stun*, *wound*, and *mortal* points. Stun damage is mostly cosmetic. Wound damage represents physical damage to an object's

A Short List of Property

These are a few objects commonly found in and around heroic adventures. Each is rated for durability, toughness, and its armor level. Use this as a guide for determining the damage resistance of similar objects that aren't covered in this list.

Object	Durability	Toughness	Armor	Object	Durability	Toughness	Armor
Building:				Military plane	6	G	moderate
shack	4	O	light	Pistol	2	O	moderate
house	5/section	G	light	Refrigerator	5	G	light
commercial	6/section	G	light	Rifle	3	O	moderate
huge	12/section	A	moderate	Safe	8	A	heavy
Car	5	G	none	Streetlight	3	O	light
Chair	2	O	none	Tire	4	O	light
Computer, desktop	1	O	none	Tree, small	3	O	light
Control panel	4	O	light	Tree, large	6	G	light
Desk	2	O	light	Tank	12	A	heavy
Door, armored	4	A	heavy	Truck, large	10	G	light
Door, interior	4	O	light	Truck, light	7	G	light
Door, reinforced	6	G	moderate	Video screen	1	O	none
Glass, thin	1	O	none	Wall:			
Glass, thick	2	G	light	plaster	2/section	O	light
Jumbo jet	15	G	light	concrete	3/section	G	moderate
Light airplane	4	G	none	steel	5/section	A	heavy

structure. Mortal damage is extreme physical damage.

Size is an important determinant in an object's durability. One good hit with an ax can take down a sapling, but it takes a number of hits to cut down a large tree. For very large objects such as skyscrapers or battleships, you can assign each section its own durability score.

At times, objects and vehicles may be forced to make a durability check as a result of damage or a specific situation. A durability check imitates the Stamina skill check or Constitution feat check a character might make. The object's Stamina-endurance skill score equals its wound rating (twice its mortal rating).

Toughness

As described under "Firepower and Toughness" above, toughness describes what scale is necessary to seriously damage the object or device. Objects are rated as Ordinary, Good, or Amazing.

Ordinary toughness objects don't have the mass or thickness to absorb a lot of damage. Living creatures, light furniture, and small appliances are Ordinary objects.

Good toughness objects are bigger, sturdier, and generally harder to damage than Ordinary objects. Many vehicles and light buildings or installations are considered Good.

Amazing toughness objects are

large, sturdy, and unusually resistant to damage. A tank, armored spacecraft, heavy blast doors, or reinforced buildings would be considered Amazing.

Armor

Objects may be protected by an outer casing or surface that can deflect damage. Armor for objects works exactly like armor for characters—it absorbs some or all of the primary damage of an attack. Armor has no effect on secondary damage.

Here are some general guidelines for object armor ratings. Think of describing an object as either fragile or protected by light, moderate, or heavy armor. See TABLE G13: OBJECT ARMOR.

Effects of Damage

When a device or vehicle runs out of stun points, some minor failure usually results—a nonvital system breaks down, or a vital system acquires a penalty to its operation. This is described in some detail for vehicles (see Chapters 10 and 11), but you'll have to use your imagination for other machines.

A device or object that runs out of wound points almost certainly loses at least one vital function, and possibly more. A door or wall that's out of wound points isn't going to keep anyone out anymore—there's a hole big enough to get through. Losing

**TABLE G13:
OBJECT ARMOR**

Armor	Damage Stopped
None	none
Light	d4
Moderate	d6+2
Heavy	2d4+1

mortal points means that large portions of the device or object have sustained permanent damage. Repair will be difficult and involve replacement of components. An object that runs out of mortal damage ceases to exist as a functional device. For example, the wall collapses or the tree topples.

Rule of Common Sense

Remember, keeping track of property damage isn't the point of the game. You don't have to determine the fate of every bullet that goes astray. This is only a quick sketch of how to handle the topic of breaking things when it's dramatically appropriate. A hero shouldn't be able to shoot a safe open or knock a house down with a normal pistol. Let common sense rule your decisions about what the heroes can and can't break, and how long it takes them to do it.

HAZARDS

Guns and knives aren't the only way for your heroes to meet an untimely end. The galaxy is a dangerous place. The secret research labs, industrial complexes, military bases, and alien ruins that heroes routinely investigate present certain danger. Heroes get pushed off buildings, exposed to vacuum, electrocuted, infected, burned, drowned, poisoned, and irradiated. Being a hero is a tough job, and it's part of your job to challenge your heroes.

Resisting Hazards

Heroes exposed to hazards are entitled to a roll to avoid the worst of the effects. Usually, this is a Constitution feat check.

The amount of damage a hazard inflicts is based on the success or failure of the Constitution feat check. A hero who generates an Amazing success manages to evade death or dismemberment. On the other hand, a hero who rolls a Critical Failure stumbles headlong into grisly doom. Sometimes, a hero may sustain significant damage despite a successful check: nasty hazards inflict damage on any result, but less damage with an Amazing or Good success.

You should apply modifiers that you feel are appropriate to Constitution feat checks caused by hazards.

Acid

Acid and caustic chemicals aren't fun at all. Heroes might be struck by flasks of acid flung at them by cackling mad scientists, or they could fall into vats of dangerous chemicals. The average, powerful acid inflicts damage as shown on TABLE G14: ACID DAMAGE.

Acid presents a more potent threat since it continues to do damage for rounds after immediate exposure. If a character is able to neutralize the acid by an immediate cleansing or similar process to remove the acid, the damage ceases. Deadlier chemicals could inflict higher damage (use d6 or d8 increments); faster-acting chemicals might affect the victim once per action phase. Weaker chemical could do less damage or cause damage once every minute.

Corrosive substances may destroy equipment at your discretion. Guns and heavy armor are fairly resistant to acid, but more vulnerable items could be wrecked by immersion.

Disease

Contracting a horrible disease isn't heroic, but it does create the opportunity for a character to battle through illness. As a general rule, heroes don't stand a chance of getting sick unless you think that it might be dramatically or realistically appropriate. Here are some guidelines:

- ▶ The hero suffers wound damage that is left untreated.
- ▶ The hero breathes, drinks, or eats in an extraterrestrial environment without taking precautions.
- ▶ The hero is wounded by a diseased animal.
- ▶ The hero is exposed to an area or item contaminated with a contagious disease.

When a character is exposed to a disease, he must make a Constitution feat check to resist this hazard.

Check Result	Effect
Critical failure	Terminally ill
Failure	Extremely ill
Ordinary	Ill
Good	No effect
Amazing	No effect

This initial feat check to resist the disease may be modified by the disease's strength, as shown on the table below. You choose the strength of the disease.

Strength	Modifier
Marginal	-1 bonus
Ordinary	no modifier
Good	+1 penalty
Amazing	+3 penalty

The effects of a disease aren't immediately felt. You decide how quickly the disease manifests. The incubation of a disease refers to how long it takes before the victim begins to experience symptoms. Before onset, the disease is detectable with a medical examination, and it can be treated preemptively by means of the Medicine-treatment skill. Most diseases have Marginal or Ordinary incubation. See the table below.

Incubation	Onset
Marginal	1d4 weeks
Ordinary	2d4 days
Good	1d4 days
Amazing	3d4 hours

Disease Effects

If a doctor doesn't catch the disease before the first symptoms appear, the victim becomes sick.

Ill characters suffer a +2 penalty to all actions. Each day, the character must attempt a Constitution feat check: Critical Failure or Failure, worsen to extremely ill; Ordinary, no change; Good or Amazing, the character recovers.

Extremely ill characters are almost completely incapacitated. In desperate situations, an extremely ill character may attempt a Resolve-physical resolve check to force himself to his feet, but all actions receive a +3 penalty. Each day, the character must make a Constitution feat check: Critical Failure or Failure, worsen to terminally ill; Ordinary, no change; Good, improve to ill; Amazing, recover completely.

Terminally ill characters are comatose, although they can rouse themselves for a few words of conversation with a Resolve-physical resolve check. Every six hours, the character must attempt a Constitution feat check: Critical Failure, suffer 2 points of mortal damage; Failure, suffer 1 point of mortal damage; Ordinary, no change; Good or Amazing, improve to extremely ill.

TABLE G14: ACID DAMAGE

CON Feat Check Result	Splash	Immersion
Crit. Failure	3d4w*	5d4w*
Failure	2d4w*	4d4w*
Ordinary	d4w	3d4w*
Good	no damage	2d4w*
Amazing	no damage	d4w

* Damage continues each round, diminishing by d4 per round.

When the hero sustains mortal damage, he must make a Stamina-endurance check as if suffering mortal damage in combat; see "Mortal Damage" above.

Drowning

Submerged characters can automatically hold their breath for a number of rounds equal to one-half their Constitution score before they begin to drown. This assumes the character has a moment to fill his or her lungs with air; otherwise, the character has only one round before drowning begins.

Thereafter, standard rules for suffocation apply. See "Suffocation" later in this chapter. Heroes who have purchased ranks in the Movement-swim specialty skill have a bonus to their Stamina-endurance checks when holding their breath. Refer to the skill description.

Electricity

The amount of damage a character sustains from an electrical shock depends on the strength of the current and the path it takes through the body.

The victim's Constitution feat check reflects the likelihood of damage, but you can apply modifiers as you see fit. A dripping-wet hero standing on an iron grate might have a +3 penalty to his Constitution feat check; a well-insulated character wearing rubber gloves and non-ferrous tools could gain a -3 bonus.

Electrical shocks may scramble electronic devices such as computers or radios at your discretion.

Exposure

Characters stranded in the middle of nowhere in bitter cold or blistering heat may experience damage or even death. The rules for exposure

TABLE G15: ELECTRICAL DAMAGE		
CON Feat Check Result	Shock	Lightning
Crit. Failure	d12w	2d6m
Failure	d6w	d6m
Ordinary	d8s	d12w
Good	d4s	d12s
Amazing	no damage	d6s

to hostile environments are covered in "Environments" later in this chapter.

Falling

In heroic games, characters fall down sooner or later. The amount of damage a falling victim sustains depends on the length of the fall and the result of an Acrobatics-fall skill check. A Dexterity feat check is used if the skill is unavailable.

The fall categories are: extremely short (3 meters or less); short (3 to 10 meters); medium (11 to 30 meters); long (31 to 60 meters); and terminal (61 meters+).

The amount of time a hero spends falling is short, unless he starts at a very high altitude. Characters accelerate at 10 meters every second, and there are about 3 seconds in every phase. Here's a rough guideline for how long it takes a character to hit the ground:

Length of Fall	Time Falling
up to 60 meters	1 phase
60-200 meters	2 phases
200-400 meters	3 phases
400-600 meters	4 phases
+ 200 meters	add 1 phase

A fall of about 200 meters is long enough for a human to reach terminal velocity—the fastest speed a falling person will travel, given air

resistance normal to Earth. In vacuum, a falling character would continue to accelerate until impact.

Some falls are less hazardous than others; what a hero lands on can make a big difference in how much damage a fall causes. Apply the following modifiers to the hero's roll on TABLE P15: IMPACT DAMAGE.

Falls in an environment with an unusually low or high gravity may alter the damage caused. See "Environments" later in this chapter.

Armor can't counter fall damage, but it may negate some or all of the extra damage inflicted by spikes or other nasty devices waiting at the bottom.

Fire

Burning buildings, forest fires, volcanic eruptions, and other similar events seem to attract heroes like honey draws flies. Being near a fire isn't healthy; the heat and smoke can rapidly overcome a character, even if he never actually catches fire. If a hero is exposed to direct fire, he sustains severe damage. Check once

TABLE P15: IMPACT DAMAGE

Check Result	Severity of Impact				
	Ex	S	M	L	T
Crit. Failure	d6w	d6+2w	d6+2m	d8+4m	d12+8m
Failure	d4w	d4+2w	d4+2m	d8+2m	d12+6m
Ordinary	d6s	d4w	d4+1m	d6+2m	d8+6m
Good	d4s	d4+2s	d8+2w	d4+2m	d6+4m
Amazing	—	d4-2s	d6+2w	d8+4w	d12+6w

Fall Modifiers

Situation	Modifier
Extremely short fall	
into water	-3
Short fall into water	-2
Medium fall into water	-1
Very soft landing site (deep snow, garbage)	-2
Soft landing site (bushes, mud)	-1
Uneven or jagged surface	+1
Very jagged or uneven surface	+2
Spikes/stakes:	
Severity Ex or S	Add +d4w
M or L	Add +d8w
Severity T	Add +d20w

TABLE G16: FIRE DAMAGE

CON Feat Check Result	Heat/smoke	Flame
Crit. Failure	2d6s*	3d6w
Failure	2d6s	2d6w
Ordinary	d6s	d6w
Good	d4s	d6s
Amazing	no damage	no damage**

* Treat as on fire in following rounds.

** If a character or objects has caught fire, this result indicates the fire is extinguished.

per round for the fire's effects on TABLE G16: FIRE DAMAGE.

Add bonuses or penalties as you see fit. Extremely hot fires or chemical fires may add a penalty to the Constitution feat check. Reflective or insulated clothing, such as combat armor, is useful against fire damage, especially if the hero doesn't have to breathe hot smoke. A hero may upgrade his success by one step if using a respirator or independent oxygen supply, and another step if wearing heat-reflective or insulated clothing. For example, a firefighter in an overcoat and breathing mask sustains only d4s from heat and smoke with a Failure result, or d6s

on a Critical Failure. In addition, a character can use his armor's energy (En) rating to negate some or all of the damage.

A hero can spend an action dropping to the ground, wrapping himself in a blanket, or taking similar protective measures to extinguish the fire. In this case, any successful result on the Constitution feat check indicates that the fire has been extinguished.

Of course, many secondary hazards may arise with major fires: burning wreckage, structural collapse, exploding volatiles, and electrical shorts are a few of the more common. Heroes carrying anything

flammable or vulnerable to heat damage may lose their possessions.

Poison

One of the most common and deadly hazards heroes face is the threat of poison. Many living creatures such as fish, insects, frogs, snakes, spiders, jellyfish, and mollusks manufacture deadly compounds for immobilizing prey or for self-defense. Heroes might also be exposed to man-made poisons such as nerve gas, industrial solvents, or riot control agents. Poisons are described by type, strength, and vector.

Poison Type

Regardless of the origin of the toxin, poisons have one of six basic effects.

Hemotoxins attack the blood, causing unacceptable thinning, clotting, or interfering with the blood's ability to carry oxygen. An average hemotoxin has an onset time of 10 minutes and an attack duration of 4 hours.

Neurotoxins interfere with the chemical signals of the nervous system, causing the victim's body to shut down. An average neurotoxin has an onset time of 1 minute and an attack duration of 10 minutes.

Necrotoxins kill or dissolve living tissue in the vicinity of the injury. An average necrotoxin has an onset time of 1 hour and an attack duration of 12 hours.

Caustic agents destroy vulnerable tissues through chemical burns, and can kill if inhaled. An average caustic has an onset time of 5 minutes and a duration of 4 hours.

Paralytic venoms immobilize the victim for some period of time. An average venom has an onset time of 1 minute and a duration that depends on the victim's Constitution feat check result.

Finally, *irritants* can briefly incapacitate a person by inducing nausea, coughing and sneezing, or other unpleasant symptoms. An average irritant has an onset time of 1 round and a duration of 10 minutes after exposure has ended.

Poison Strength

The strength of any particular poison is measured by three characteristics: the bonus or penalty to the victim's Constitution feat check, the onset time, and the duration of the attack.

Catching Fire

The initial effects caused by exposure to fire are significant, but the real danger is that objects and characters may catch fire themselves. To determine if an object or creature catches fire, first categorize it as *flammable*, *fire-resistant* or *fireproof*.

Flammable objects include any material likely to combust at a moment's notice. Flammable objects, including gasoline, paper, and dried leaves, can light with the application of any form of fire damage—stun, wound, or mortal. Most flammable objects can be assumed to immediately catch fire on exposure to any fire damage, but you may allow a successful durability check (see "Property Damage" above) to prevent combustion. If the check fails, the object is on fire, and suffers damage every round as noted on Table G16.

Fire-resistant objects include materials that may catch fire under high temperatures or severe fire exposure. Fire-resistant objects, including most fabrics, plastics, and characters, can catch fire when they suffer wound or mortal fire damage. Allow the object or character to make a durability check or Constitution feat check. Failure indicates that the object or character has caught fire, and suffers damage every round as indicated on Table G16 until the fire is extinguished.

Fireproof objects resist fire damage except under the most extreme circumstances. Fireproof objects, including metals, rocks, and ceramics, only catch fire when exposed to mortal fire damage. Allow the object to make a durability check with a -4 bonus; failure indicates the object has begun to combust or melt under the extreme temperature. Apply damage from Table G16 every round.

TABLE G17: POISON

CON Feat Check Result	Hemo- toxin	Neuro- toxin	Necro- toxin	Caustic Agent	Paralytic	Irritant
Critical						
Failure	d4+2m	d6+1m	d4m	d4+1m	d4 days	+3 penalty
Failure	d4m	d4+1m	d8w	3d4w	6d4 hours	+2 penalty
Ordinary	d6+1w	d8+1w	d6w	2d4w	d4 hours	+1 penalty
Good	d4w	d6+1w	d4w	d4w	+1 penalty	no effect
Amazing	d6s	d6+1s	d4s	none	no effect	no effect

At the end of onset time, the victim begins to suffers the listed damage or the listed penalty to all actions, or is paralyzed for the listed duration.

Poison Vectors

Poison can be delivered by several different mechanisms. *Insinulative* poison is injected into the bloodstream by fangs, stingers, or envenomed weapons. In order to poison a character with an insinulative venom, a successful attack that inflicts at least 1 point of primary damage—after any armor roll—is required.

◆ **Example:** A snake bites Joe, inflicting 2 wounds of primary damage, and thus 1 stun of secondary damage. Fortunately, Joe's wearing armor that stops all the wound damage. He takes 1 point of stun damage from the bite, but he isn't poisoned.

Inhaled poisons are gas, dust, or aerosol mixtures that affect any creature that breathes them in. Each round in which the character remains in an area containing a poison gas, he must attempt a Constitution feat check until he either becomes poisoned or leaves the area. A gas mask, respirator, or sealed suit of armor protects against inhaled poisons. If a hero knows there's poison in the air or anticipates the attack, he is allowed to hold his breath to avoid taking in poison gas. See "Suffocation" later in this chapter.

Contact poisons inflict their damage by making contact with the victim's skin. The poisoner needs a successful attack roll. Any hit, regardless of the damage inflicted, brings the venom in contact with the target's skin and allows it to do its work. These can be either gases, liquids, or powders. The hero requires a completely sealed suit with a filter mask or independent breathing device to be safe. If a contact poison is smeared onto a weapon, treat it like an insinulative attack.

Ingestive poisons must be consumed. As long as the hero doesn't eat or drink such a substance, it has no effect.

Poisons may vary in lethality depending on how the victim is exposed. For example, mustard gas is powerful if inhaled, but fairly weak if contact is the vector.

Poison Effects

When a character is poisoned by insinulative, inhaled, or contact poisons, the effects are felt almost immediately. Ingestive poisons may not be noticed for several hours. During the onset time, the victim feels progressively worse. The exact symptoms depend on the poison involved, but nausea, seizures, blindness, numbness, paralysis, bleeding, elevated heart rate, and difficulty in breathing are all possible.

At the end of the onset time, the poison runs its course over the *duration of attack*. Roll the damage and divide its effects over the duration. This is when the victim actually suffers any damage the poison inflicts. When the attack ends, the hero suffers no more damage.

Heroes with the Medical Science-treatment skill can attempt to aid poisoned characters. In the absence of a specific antidote, the treatment check provides a -1, -2, or -3 bonus to the victim's Constitution feat check, which may be rerolled after medical attention. If the medic has the specific antidote at hand, the victim may shift the result of his Constitution feat check by two grades. For example, a Critical Failure result becomes an Ordinary success.

Six Common Poisons

Here are some nasty venoms that heroes might run across in the course of their adventures:

► **Rattlesnake bite:** Hemo-toxin. Insinulative. +1 penalty to the Constitution feat check. Onset time 10 minutes, duration 1 day.

► **Cobra bite:** Neurotoxin. Insinulative. +2 penalty. Onset time 1 minute, duration 5 minutes.

► **Nerve gas:** Neurotoxin. Inhaled: +3 penalty; contact +1 penalty. Onset time of 1 round, duration 1 hour.

► **Spider bite:** Necrotoxin. Insinulative. -2 bonus. Onset time 1 hour, duration 6 hours.

► **Mustard gas:** Caustic agent. Inhaled: +3 penalty; contact -3 bonus. Onset time 10 minutes, duration 24 hours.

► **Tear gas:** Irritant. Inhaled: +2 penalty; contact -2 bonus. Onset time 1 round, duration 10 minutes.

Starvation

Thirst and starvation may be fatal. People can live on minimal food for several months, and can survive several weeks with no food at all. Water is much more critical. Going a few days without water can kill. For game purposes, treat the lack of food or water as disease—over the course of time, the victims become ill, extremely ill, and finally terminally ill. They're not really sick, but the penalties described for these stages of dis-

ease are a reasonable description of the effects of dehydration and starvation.

Suffocation

Suffocation can be brought on by any number of causes: exposure to an inert atmosphere, smothering, or strangulation. If a character has prepared with a deep breath, he can hold his breath for a number of rounds equal to one-half his Constitution score. Beginning on the round after a character has passed his limit, the hero must make a Stamina-endurance check. Each round, the character continues to make Stamina-endurance checks with a cumulative +1 penalty.

The result of the check determines how much stun damage is suffered: Critical Failure: 4 stuns; Failure, 3 stuns; Ordinary, 2 stuns; Good, 1 stun; Amazing, none. Once a character has exhausted all of his or her stun points, unconsciousness usually follows. You may allow desperate characters to make a Resolve-physical resolve check every round to stay awake. Damage continues to accrue, as wounds instead of stuns.

Strangulation

A few weapons or unarmed techniques kill by strangling the victim. Generally, surprise is necessary to gain a stranglehold. See "Overpowering" above. The attacker must roll a successful unarmed attack to establish the stranglehold. Instead of inflicting damage, he forces his victim to begin making Stamina-endurance checks once per round, as described above. Once the victim runs out of stun points, he falls unconscious; the attacker can maintain his chokehold to exhaust the victim's wound points and mortal points.

A character caught in a stranglehold can struggle. Any success in a Strength feat check or unarmed attack allows the victim to get free.

A character being strangled can't cry out for help, but he may make a fair amount of noise by thrashing around.

ENVIRONMENTS

As the planets, moons, and asteroids in Earth's solar system demonstrate, the universe can be a hostile place. An unprotected human would die in minutes—or even seconds—on the surface of any of Earth's neighboring planets or their satellites.

It's natural to assume that heroes adventuring on Earth or Earthlike planets can ignore the physical environment. However, there are a lot of places on Earth where unprotected humans don't belong: inside volcanoes, at the bottom of the sea, 10 miles up in the stratosphere, at either of the poles, in Death Valley at noon, or in Wisconsin during winter.

This section examines the important features of a modern or far-future roleplaying environment. Heroes routinely find themselves in hostile and dangerous settings, risking life and limb in places that no sane person would dare to venture. So, how does the world around the heroes affect them?

The rules presented below are here for your benefit. Use them as you see fit. If your campaign presents a harshly realistic universe, adjust the effects and damage caused by environmental exposure accordingly. On the other hand, if you run a campaign of super heroes, you may decrease and modify the rules presented below.

The Endurance Challenge

Anytime a hero faces the threat of freezing, heat exhaustion, suffocation, drowning, or death by the forces of nature, have the player make Stamina-endurance checks for his hero. This is a special kind of challenge that comes into play anytime a hero is trying to hold up against something that can exhaust or kill him over time.

There are two basic kinds of endurance challenges.

Exposure Challenge

This first challenge deals with forces that inflict direct harm to a hero—such as extremes of heat or cold, or mildly poisonous atmospheres. For these challenges, a Stamina-endurance check determines how many points of stun damage the hero suffers while exposed.

Endurance Check	Result
Critical Failure	4 stun points
Failure	3 stun points
Ordinary	2 stun points
Good	1 stun point
Amazing	no damage

The interval between checks depends on the severity of the environment and the degree of exhaustion. These intervals can occur as frequently as once per phase, or as slow as once per hour. Some exposure checks may impose a cumulative step penalty. In this case, the first exposure check suffers a +1 penalty, the second check suffers a +2 penalty, the third a +3 penalty, etc.

Once a character runs out of stun points, he begins to take wound damage at the same rate he suffered stun damage. Treat these wounds just like normal injuries. You may choose to allow a hero who loses all of his stun points to remain conscious—provided he makes a successful Resolve-physical resolve check for each time interval.

When a hero runs out of wound points, he collapses and begins to die. Dying characters must make a Stamina-endurance check as per "Damage" earlier in this damage.

Exhaustion Challenge

Other challenges test how well heroes fight against exhaustion. Some environments, such as an overly thin or thick atmosphere, or heavy gravity, require a hero to make Stamina-endurance checks as though participating in a forced march or heavy labor. The result of the check determines any fatigue damage inflicted by the hero's strenuous efforts: Critical Failure, 2 points of fatigue damage; Failure, 1 point of fatigue damage; any success, no damage.

The interval between checks depends on the severity of the environment and the degree of exhaustion. Such intervals may occur as frequently as once per phase, or as slow as once per hour.

Once a character runs out of fatigue points, he collapses in a state of utter exhaustion. He's conscious, but his body simply won't take more abuse. If the hero attempts to forge on, heedless of his body's limits, he must first deal with the hefty penalty from the accumulation of fatigue points. In addition, the character suffers stun damage at the same rate he

suffered fatigue damage while taxing his body in such a way. Don't forget that penalties for fatigue—+1 per point—apply to both Stamina and Resolve skill checks.

Recovery

Heroes can't recover stun points lost to environmental exposure until they remove themselves from the dangerous environment. Similarly, heroes only recover fatigue points when they rest. At your discretion, you can allow a hero to recover all of his lost stun points when he escapes the damaging situation, or he automatically recovers at the end of the scene. You can also rule that a hero regains stun and fatigue points at the rates specified under "Damage" earlier in this chapter.

THE GRAPH SYSTEM

Descriptions of unusual environments appear in the GRAPH classification system. The GRAPH system rates the five primary factors of an environment: gravity (G), radiation (R), atmospheric composition (A) and pressure (P), and heat and cold extremes (H). Each factor is divided into six grades of measurement. For example, a typical environment on Earth could be described as G2/R1/A2/P3/H2. This section examines how these environments affect the course of the game.

Gravity

Surface gravity is determined by a planet's mass and the distance from the surface of the planet to its center. Dense and massive planets generally have more powerful gravity than worlds lacking in size and mass.

A moderate increase or decrease in gravity is a nuisance; crushing levels of gravity—or its absence—are more hazardous.

G0: Zero Gravity

Absolute weightlessness exists only in artificial environments and those rare points in space where the gravitational effects of stars, planets, moons, and asteroids are in perfect balance. Of course, environments that closely approximate zero (below 0.2 g) gravity are common.

Complicated or abrupt physical activity is difficult in zero g, at least

for those heroes who lack the necessary training or tolerance. Characters who haven't purchased the *Acrobatics-zero-g training* skill suffer penalties on all actions, since it's difficult to control movement without the resistance that gravity provides. Physical actions and skills that involve motion suffer a +3 penalty. These include Melee and Ranged combat, Movement, Acrobatics, and even the use of some Intelligence skills, such as Technical Science-repair.

G1: Low Gravity

While light gravity (0.2 g to 0.8 g) isn't life-threatening, it's inconvenient for someone who isn't used to it. Physical actions suffer a +1 penalty. This penalty reflects the difficulty of judging actions, and of reacting without overreacting, in light gravity.

In addition to inhibiting coordination, light gravity has obvious effects on jumps and falls. The *movement modifier* listed on TABLE G18: GRAVITY provides an increase on any running or jumping distance the hero attains—it's possible to leap a dozen meters or more in low-g situations. The *fall modifier* reduces the damage suffered during a fall in light gravity environments. For example, treat a Medium fall in low gravity as a Short fall. See "Falling" earlier in this chapter for more details.

Humans don't have a biological need for gravity in the short run, but extended stays in very light gravity aren't healthy. Bones, muscles, and the cardiovascular system weaken over the course of weeks or months. To reflect this, you might decide that a hero who returns to normal gravity after an extended stay in low gravity suffers penalties as if he were in a G3 environment (except for falling)—at least until he reacclimates to normal gravity.

G2: Moderate Gravity

Surface gravity between 0.8 and 1.2 g has little effect on characters. At their extremes, moderate-gravity environments may produce feelings of awkwardness and unease, but acclimatization is quick, and there are no penalties to actions.

G3: High Gravity

G3 environments include gravity from 1.2 to 2.0 g. A surface gravity of 2.0 g is about the limit of human tolerance on an extended basis.

High gravity imposes a +1 penalty to all physical actions, and reduces the movement and jumping rates of characters by 25%. In addition, the fall modifier listed on TABLE G18: GRAVITY increases the deadliness of falls. In a G3 environment, a Short fall becomes a Medium fall, and a Medium fall becomes a Long fall.

Finally, the stress of higher gravity requires an exhaustion check once every day (see "Exhaustion Challenge" earlier in this chapter for more details).

Powered armor helps to offset the effects of high gravity. It negates the physical action and movement penalties of high gravity. A character wearing powered armor receives a -2 bonus to all exhaustion checks brought about by a G4 environment. These enhancements have no effect on increased falling damage.

G4: Very High Gravity

Unassisted life in an environment with very high gravity (2.0 to 4.0 g) is possible in the short term, but not the long term. See TABLE G18: GRAVITY for more details. The effects are similar to, but more powerful than, the effects of high gravity.

Powered armor can't offset the effects of a G4 environment.

G5: Super High Gravity

Many planets may have a much higher surface gravity than 4.0 g, but humans can't colonize them without permanent gravity-reducing fields or facilities. Anything over 4.0 g quickly immobilizes those unfortunate enough to encounter such a high degree of gravity without protection.

Heroes must make Strength feat checks in order to attempt any movement or action, and they must also make exhaustion checks every minute. You may allow prone or crawling characters a greater interval between checks—maybe once every 10 minutes or so.

Radiation

One of the well-known hazards of space travel is radiation. Of all the ways to die, radiation poisoning probably evokes the greatest terror. It's silent, undetectable, and potentially lethal; even if a hero survives the initial exposure, the long-term health effects are devastating.

Sources of radiation are many.

TABLE G18: GRAVITY

	Physical Penalty	Movement Modifier	Fall Modifier	Exhaustion Check
60	+3	special	no falls	—
61	+1	+50%	-1 grade	—
62	—	—	—	—
63	+1	-25%	+1 grade	1/day
64	+3	-75%	+3 grades	1/hour
65	+5	-100%	+4 grades	1/minute

Worlds with a weak or nonexistent magnetic field, such as Mars, constantly receive radiation bombardment. A more dangerous radioactive planet is one that contains lots of particulate radiation—a planet ravaged by nuclear war, or one with an unfortunate mix of volcanic activity and radioactive ores.

For game purposes, only the immediate and near-immediate effects of radiation appear below. The risk of contracting leukemia 10 years down the road doesn't come into play in most roleplaying game scenarios.

Radiation exposure has a lot in common with battling through a serious illness: The victim may become mildly ill and pull through in a few days, he could become seriously ill and require weeks to get better, or he could become terminally ill from radiation sickness. The longer and more intense the exposure, the more likely it is that the hapless character won't survive. At PL 6 and beyond, antiradiation serum can increase a character's chance of survival.

Heroes use Constitution feat checks to resist radiation. TABLE G19: RADIATION shows the penalties and frequency for making Constitution feat checks at each radiation level. The results of the Constitution feat check are then defined on TABLE G20: RADIATION EFFECTS. Radiation may cause a character to become ill, extremely ill, or terminally ill. These effects of radiation sickness use the rules presented under "Disease" in the previous section.

Characters affected by radiation sickness don't succumb immediately. The onset time describes how long it takes the victim to reach each stage of sickness. For example, a hero who rolls a Failure on his Constitution feat check becomes ill after 1 hour, and extremely ill after 3 hours.

Radiation is measured in rems, a unit of measurement that's equivalent to the biological effect of one roentgen of X-ray or gamma-ray exposure.

R0: Zero Radiation

Environments with zero radiation, like those with zero gravity, are rare and usually artificial. Controlled and shielded laboratories are the most common sources of zero radiation environments.

Humans don't need to make endurance checks in R0 environments—though some alien species requiring background radiation for sustenance or sensory perception may suffer in this environment.

R1: Low Radiation

Low radiation is common to terrestrial planets with a magnetic field.

This field shields Earth—and perhaps similar planets—from the worst of stellar radiation. Other minor sources of radiation include heavy metals in the soil and artificial sources. Low radiation doesn't exceed 10 rems over a year.

Low radiation presents no immediate threat. Heroes and supporting cast members don't need to make Constitution feat checks and can't contract radiation sickness.

R2: Moderate Radiation

Moderate radiation, common in space, causes harm to unprotected characters. It doesn't exceed 20 rems over a single week. Short exposure to the irradiated environment can minimize damage. Heroes must make a Constitution feat check for every week (or portion thereof) spent in this environment.

An e-suit, ship hull, or colony dome provides shielding to defend against moderate radiation. Protected characters aren't required to make Constitution feat checks.

R3: High Radiation

High radiation can be found close to stars and on abnormally irradiated sites. High radiation doesn't exceed 100 rads in a single day. Heroes must make Constitution feat checks for each day (or portion thereof) spent in the environment.

TABLE G19: RADIATION

Radiation Level	CON Feat Check Modifier	Frequency
R0	no checks	none
R1	no checks	none
R2	-1 bonus	1/week
R3	no modifier	1/day
R4	+1 penalty	1/hour
R5	+3 penalty	1/minute

TABLE G20: RADIATION EFFECTS

CON Check	Effects	Onset
Critical Failure	Terminally ill	10/20/30 minutes
Failure	Extremely ill	1/3 hours
Ordinary	Ill	6 hours
Good	Ill	12 hours
Amazing	None	—

Soft e-suits cannot fully protect against high radiation, but allow the equipped hero to make checks as if in an R2 environment. Hard e-suits and space vehicle hulls offer complete protection.

R4: Extreme Radiation

Extreme radiation occurs close to powerful stars and on planetary environments that, through natural or artificial means, have suffered massive radioactive bombardment. Extreme radiation doesn't exceed 500 rems in a single hour. Heroes must make Constitution feat checks for every hour (or portion thereof) spent in this environment.

E-suits provide limited protection against extreme radiation; equipped heroes make Constitution checks as if in an R3 environment. Space vehicles and planetary domes provide complete protection.

R5: Lethal Radiation

Lethal radiation occurs near pulsars and singularities, nuclear impact sites, and rare natural phenomena. Lethal radiation includes radiation over 500 rems/hour. Heroes must make Constitution feat checks every minute spent in this environment.

E-suits allow the wearer to make checks as if in an R4 environment. Space vehicles and artificial habitats of PL 7 and beyond usually provide complete protection, although you may rule that characters inside suffer the effects of R2 or R3 environments depending on the situation.

Atmospheric Composition

An environment might have the right temperature and the right amount of atmosphere, but the wrong chemical makeup can render it completely uninhabitable. Atmosphere comes in one of several basic varieties: inert, which signifies a lack of free oxygen; corrosive, which denotes the presence of reactive compounds, like sulfuric acid or hydrogen chloride; and toxic, which signifies a concentration of a highly dangerous substance, such as cyanide.

A0: Vacuum

Vacuum, or the lack of atmosphere, is more properly a function of pressure. The effects of vacuum are described under "P0: Vacuum," below.

A1: Inert

Inert environments present a very simple obstacle to the heroes—if they want to breathe, they have to bring their own air. You could consider the depths of a lake to be an inert atmosphere from a human's point of view. Any self-contained breathing apparatus will allow humans to survive in A1 environments. A vacuum mask fits the bill—although characters may also use e-suits. If heroes run out of air, they suffer damage as described for exposure challenges, checking once per round with a cumulative +1 penalty.

A2: Moderate

Moderate atmospheres present a mix of oxygen and nitrogen sufficient for humans and humanoid alien species. No precautions are necessary.

A3: Toxic

Toxic atmospheres contain necessary elements for respiration, along with poisonous compounds. Heroes must use a respirator mask to filter out the poisonous substances before they can breathe air from the environment. Unprotected characters must make exposure checks once per minute. Extremely poisonous substances in an environment may call for checks once every round or phase, or they may impose a penalty on the exposure check.

A4: Corrosive

Corrosive atmospheres not only present an obstacle to respiration, but also demand physical protection for the entire body. The only way to survive in a corrosive atmosphere is to utilize an independent air supply and avoid contact with the atmosphere. A soft e-suit will withstand a corrosive atmosphere for d6 days before failing. Hard e-suits, better designed to resist the acidic action of the atmosphere, can last for months or years—if owners perform periodic maintenance.

Once an e-suit is compromised, the unprotected hero inside must make exposure checks once every minute with a cumulative +1 penalty.

A5: Super Corrosive

Super corrosive atmospheres present an even more dangerous hazard. Soft e-suits dissolve in d6 hours, and hard e-suits last only d6 days. Specially constructed habitat domes, re-

lying on PL 7 field technologies, can resist the atmosphere's effect. Once a hero's suit fails, he must make exposure checks once every round with a cumulative +1 penalty.

Pressure

Atmospheric pressure refers to the density of the surrounding air. The classic problem, from a science fiction standpoint, is a vacuum. At the other end of the scale, some planets are smothered in a blanket of gas so dense that it would crush humans. Scientists measure atmospheric pressure in atmospheres (atm). One atm is equal to the air pressure on Earth, at sea level.

P0: Vacuum

The lack of any atmosphere is known as vacuum. The vacuum of interplanetary or interstellar space presents two major problems to an unprotected human. First, there's nothing to breathe. Second, the lack of any medium to dissipate or store heat means that an object in sunshine becomes very hot, while one in shadow becomes very cold. In classic SF literature, a vacuum represents the cold chill of space. In reality, a vacuum doesn't imply a temperature.

To survive in a vacuum, heroes need sealed respiration systems—such as a vacuum mask—at the very least. Something that covers exposed skin, such as a jumpsuit or e-suit, is also very helpful.

Suffocation and death from shock occur quickly in a vacuum. An unprotected hero must make exposure checks every phase with a cumulative +1 penalty.

P1: Very Thin

Very thin atmospheric pressure occurs on foreign planets, moons, or even very high altitudes on Earth. Very thin atmosphere (0.2 to 0.5 atm) causes serious, but not immediately deadly, problems. People have a hard time getting the oxygen they need from thin air, resulting in altitude sickness. This malady creates flulike symptoms, but extreme cases may lead to disorientation, paralysis, or deadly complications.

A respirator mask is sufficient for the task of compressing the atmosphere to acceptable levels. Of course, the independent breathing supply of a vacuum mask or e-suit provides full protection. Unprotected

characters must make endurance checks every hour. If a character is suddenly exposed to very thin atmosphere, he may develop altitude sickness. This requires the hero to make a Stamina–endurance check to resist stun damage. See “Exposure Challenge” on page 61 for details.

P2: Thin

Thin atmospheres (0.5 to 0.8 atm) present little, if any, danger. The body adapts quickly to conditions which are common to high altitudes on Earth. Respiration may feel difficult, especially if exposure to thin atmosphere occurs suddenly. No endurance checks are required by the thin atmosphere itself—though characters forced to make Stamina–endurance checks due to exertion or some other reason receive a +2 penalty on those checks.

A respirator mask, vacuum mask, or e-suit nullifies this penalty.

P3: Moderate

Moderate atmospheres (0.8 to 4.0 atm) present no danger to a character. No endurance check is required.

P4: Dense

Some environments—alien worlds or deep unexplored mountain valleys—may have unusually dense atmospheres. Dense atmospheres (4.0 to 20.0 atm) create breathing difficulties, vascular damage, and eventually seizures. The best protection is a sealed respiratory system; the air isn’t thick enough to physically crush or impede a human from moving around, but it would eventually cause severe health problems.

A hero caught without a respirator must make an endurance check once every hour. With a respirator mask, the interval between checks increases to once every day. E-suits provide complete protection.

P5: Crushing

Gas giants and venerian worlds may have atmospheres so incredibly dense that they can physically crush an unprotected human. Crushing atmospheres may exceed hundreds and even thousands of atmospheres (atms). The only protection against an environment this hostile comes from a space vehicle. Even the best environmental suits can’t protect a character in crushing conditions. This atmosphere demands exposure checks once per phase.

Heat and Cold

On Earth, temperatures from -50°C (-58°F) to 50°C (125°F) are not unusual in extreme areas. Neither of these extremes is immediately lethal to an unprotected human—although the colder extremes can incapacitate a person in a matter of minutes. On other worlds, temperatures may range from a hair above absolute zero (-273°C) to several thousand degrees.

H0: Absolute Zero

Environments this cold (-200°C and below) have almost no atmosphere—most gaseous elements and compounds condense into rain or snow. Hence, independent supplies of oxygen are needed for survival. The outer planets and moons of Earth’s solar system have surface temperatures near absolute zero.

Exposed characters without protection must make exposure checks every phase. Soft e-suits provide only partial protection; they reduce the check frequency to once every hour. Hard e-suits, given their ability to provide heat, offer complete protection.

H1: Frigid

Temperatures of lower than -50°C (-58°F) fall into this category. Temperatures this extreme do not occur commonly on Earth, but polar regions might get this cold. Characters require breathing apparatus, since their lungs will freeze upon exposure.

Exposed characters without protection must make exposure checks every round. With extremely heavy, bundled clothing or a makeshift shelter, the frequency of the exposure checks drops to once every hour. E-suits provide complete protection.

H2: Temperate

Temperate environments fill the range between -50°C (-58°F) and 50°C (125°F). Generally, no checks are required for survival in a temperate environment, at least in the short term.

At both their hot and cold extremes, these environments pose no threat to humans. However, without proper supplies of water, clothing, and shelter, prolonged contact with these extremes requires exposure checks once every hour or day, at your discretion. In extreme hot or

cold, heroes undergoing forced marches or heavy exertion may suffer a +1 or +2 penalty to their exhaustion checks.

H3: Torrid

Unprotected heroes can no better tolerate torrid conditions than frigid ones. Torrid environments include areas in the 50°C (125°F) range and foreign environments with temperatures near the boiling point of water. Temperatures up to about 100°C are tolerable for a very short time. Heroes caught near a fire or in the vicinity of volcanic activity might be exposed to temperatures like this.

Unprotected characters make exposure checks once every minute. Soft e-suits and specialized firefighting gear can provide partial protection, reducing the frequency of exposure checks to once every 10 minutes. Thanks to their temperature control units, hard e-suits provide complete protection.

H4: Super Torrid

Temperatures over the boiling point of water, from 100°C to 500°C , demand extreme precautions. Super torrid environments are likely to occur only on other worlds, or in the midst of volcanic eruptions or hot conflagrations.

Unprotected characters make exposure checks once every phase. Soft e-suits and specialized firefighting gear provide only minimal protection, reducing the frequency of checks to once every minute. Characters in hard e-suits make exposure checks once every 10 minutes. Vehicles and tailored habitat domes are the only source of permanent and lasting protection.

H5: Inferno

Heroes caught near a sun or trapped on extremely hot planets must deal with this type of environment. Temperatures may range from 500°C up to 1000°C and higher. In addition to some form of protection from the heat, independent breathing apparatus is absolutely necessary; the air is too hot to breathe.

Only shielded vehicles or specialized habitat domes offer total safety against inferno environments. Unprotected characters must make exposure checks once every phase with a cumulative +1 penalty. Even hard e-suits can’t offer protection against inferno temperatures.



CHAPTER 4

SKILLS

The ALTERNITY game is skill-based. Although a hero's profession and Ability Scores are important in determining strengths and weaknesses, skills are the true indicator of what a hero can do in the game. One Combat Spec loaded with Unarmed Attack skills might be a martial artist or a professional pugilist, but another could select Armor Operation and Heavy Weapons for assaults on the battlefield of the third millennium. The selection of skills distinguishes two heroes with similar Ability Scores and the same profession as unique individuals.

Skill Mechanics

The core mechanic governs the use of feats and skills. As circumstances warrant, the control die may be modified by a situation die that makes the roll easier or harder, and the target Ability Score may be modified by the hero's rank in the skill. In the absence of any other modifiers or complications, fall back on these basics and you can't go wrong.

Feat Checks

Sometimes no skill is appropriate to a situation, and it's logical to use an Ability such as Strength or Constitution. The guideline you should use here is simple: if the action is an example of general use of the Ability and no skill applies, use a feat check instead of a skill check.

For feat checks, roll the control die (d20) with a base situation die of +d4. You can modify the situation die to reflect the particulars of the situation. If the dice roll is equal to or less than the character's relevant Ability Score, success is achieved.

Examples of feats include attempts to lift heavy weights with Strength, catch a thrown object with Dexterity, resist radiation with Constitution, solve alien puzzles with Intelligence, maintain moral composure with Will, or establish a first impression with Personality.

Level of Training

Players naturally keep track of the broad and specialty skills that their

heroes possess and try to make game decisions that allow their heroes to bring those skills into play. However, an action-filled adventure may present the heroes with situations that they can't anticipate.

Once you have determined what skill is appropriate for a given situation, you can then compare the character's level of training: *untrained*, *broad skill*, and *specialty skill*.

Untrained

If the hero has neither the appropriate specialty skill nor the broad skill, he's considered to be *untrained*.

Sometimes it's the weren brawler who has to disarm the bomb. Untrained skill checks are difficult, but a chance of success always exists.

An untrained skill check is always made using the most appropriate broad skill. In the example above, the weren needs to make a Demolitions check with a +d4 base situation die.

Untrained skill checks are made against half the hero's Ability Score, rounding down if necessary; if the weren has an Intelligence of 11, she needs a roll of 5 or less to succeed in disarming the bomb.

Broad Skill

If a hero doesn't have the exact specialty skill in question, he can still fall back on the associated broad skill. For example, a hero might have invested in Modern Ranged Weapons—rifle, but if the only weapon at hand is a pistol, skill ranks in *rifle* don't help at all. The character has to make the attack using the Modern Ranged Weapons broad skill.

Using a broad skill when a spe-

cialty skill isn't available carries two disadvantages. First, the hero can't use skill ranks to increase his skill score. Broad skills are never modified by skill ranks; the roll for a broad skill is always made against the appropriate Ability Score.

Second, the broad skill's base situation die is +d4, making it one step more difficult than a specialty skill. A rifleman has to use his unmodified Dexterity score with a +d4 penalty to employ a pistol in combat. It's a good weapon, but not nearly as deadly as his rifle would be.

Specialty Skill

Having the exact skill that a situation demands is the most favorable condition for both villains and heroes. A high Personality score and the Deception broad skill count for something, but there's no substitute for the *gamble* skill. A hero with *gamble* 4 and a Personality of 12 has a skill score of 16.

Specialty skills enjoy another significant advantage over broad skills: The base situation die for a specialty skill is a +d0, one step better than the situation die for a broad skill.

Prohibited

A few skills are unavailable to any hero who hasn't taken the time and effort to study them. Skills marked in blue on TABLE P19: SKILL LIST on pages 64–65 in the *Player's Handbook* can't be used by untrained characters. For example, while most humans have the Vehicle Operation broad skill, unless a hero has the *space vehicle* specialty, he can't even try to pilot a spaceship.

You can relax this restriction under certain circumstances. If the untrained character flying the spaceship is in constant communication with a skilled pilot, his friend might be able to talk him through the process, especially during a routine flight. Or, if the shuttle has a powerful artificial intelligence for an on-board computer, the AI might be able to tell the untrained pilot how to switch on the automatic functions and keep out of serious trouble.

Complex Skill Checks

For many tasks and skills, a single dice roll immediately determines whether or not a character succeeds and the degree of success achieved. When jumping across a chasm, shooting a gun, or noticing the hidden ambusher, success or failure is immediately apparent.

Other tasks that are more complicated or time-consuming use a complex skill check. Some skills, described in both this book and the *Player's Handbook*, automatically

use this method. In addition, you can use complex skill checks to build suspense and tension, even in circumstances that normally use single checks. For example, an important contest of marksmanship or a challenging search may call for multiple successes and multiple rolls.

Complex skill checks demand that a number of successes be achieved to complete the task. Depending on the exact task, multiple actions and skill checks add together over the course of several phases, rounds, hours, days, or even weeks. Skill checks are rolled normally, and the results determine the number of successes achieved. An Ordinary result counts as 1 success, a Good result counts as 2 successes, and an Amazing result counts as 3 successes.

Conditions provide situation die modifiers. Apply bonuses when the situation is in the character's favor, and penalties when the circumstances warrant a more difficult task or series of tasks. For example, an Amazingly difficult situation provides +3 penalty, but an Amazingly easy situation provides a -3 bonus.

Complexity determines the number of successes required to complete the job. Marginal tasks are the least complex and Amazing tasks the most complex.

Three Strikes Rule

Like single checks, complex skill checks allow the possibility of failure. While Ordinary, Good, and Amazing results add a number of successes, a Failure result adds no successes. A Failure result indicates that no progress was made. The character can continue to work on the task during later actions.

If a character rolls three Failure results during a complex skill check, the attempt is ruined. The task is simply beyond the character's ability until conditions change—new equipment becomes available, the hero improves his skill rank, or an expert offers assistance. Of course, you can decide that it's impossible to fail, and allow the hero to try again.

Critical Failure

A roll of 20 on the control die brings trouble to the acting character. Depending on the particulars of the situation, you can assign any of the following outcomes as a result of a Critical Failure.

► **Disaster:** Some harmful event related to the action is set off. Important files are erased, alarms are triggered, or equipment is damaged.

► **Start Over:** The significant mistake erases all accumulated successes, and the complex skill check begins again.

► **Vain Effort:** The lethal mistake ends the complex skill check in failure, and the action can't be attempted again until conditions change.

Overlooked Skills

The hero sheet is a useful tool for players and Gamemasters. It provides a listing of every skill the hero has spent points on, summing up the character's training and expertise at a glance. This can be somewhat deceptive, though. Often, players have more options at their disposal than they think they do.

Innate Skills

The first group of skills that players overlook are the hero's innate skills, the species defaults that every character has. See Table P4 on page 34 in the *Player's Handbook*.

Broad Skills

It's also easy to forget the scope of a broad skill. While a hero may purchase the Business broad skill in order to gain knowledge of the corporate specialty skill, the broad skill also provides the ability to use *small business* or *illicit business* specialty skills (with a +d4 base situation die). The broad skill assumes a basic knowledge of each of its specialty skills.

The only specialty skills that can't be duplicated by using the parent broad skill are the prohibited skills, marked in blue in the skill list.

Untrained Skills

The final batch of skills that most players tend to forget is every other skill on the list. Heroes can try to use a great number of skills at their untrained scores. A character who knows nothing about repair can still try to fix something—it's just tougher for that hero. Unless a skill is prohibited, any hero can take a shot at it. Here's a short list of some of the more common broad skills heroes might try to use despite a lack of training during the course of an adventure:

It's Your Game

The skill lists presented in this book and the *Player's Handbook* are for your use. Feel free to modify TABLE P19: SKILL LIST to fit the particulars of your campaign. You can decide to make skills prohibited or make prohibited skills open to untrained use. You can raise or lower the cost of any skill. You can decide that certain skills are only available to certain professions. You can even offer skills free of cost to all heroes. It's your game.

For example, if your heroes spend all of their lives aboard a *gigantic starship*, you might reduce the cost of *System Operation* specialty skills and offer the broad skill as a free skill. Or, if you place the heroes as agents of federal law enforcement, Law and its specialty skills might be just as available. Or, they may be *ambitious members of a corporation*, with access to Business. Use imagination to make the game your own.

Skills to Watch

While every skill may prove useful in answering challenges, a few can play unusually important roles, possibly altering the course of an adventure. It's not a bad idea to keep track of which heroes in your adventuring group have the following skills:

Manipulation may be used by heroes to pick locks and open doors you didn't expect them to reach.

Computer Science is likely to be used on any computer you leave lying about in the bad guys' base. Be ready to explain what the heroes find when they skim through the villains' files.

Security has the potential to bypass alarms, tripwires, or sensors that you're counting on to spring the next scene.

Awareness determines surprise. It will be difficult to ambush characters with high intuition scores.

Investigate is likely to be used in any room or scene that looks remotely interesting. Be ready to respond to a few detailed questions.

Deception may alter the way the villains or their minions respond to the heroes' activities, and allow heroes to avoid combat scenes.

Interaction may tamper with the loyalties or allegiances of minor villains, changing the course of an adventure. Be prepared to answer the question of what minor villains or hired muscle know about the mastermind's overall plan; heroes are adept at getting this kind of information from supporting characters.

► Any combat skill (Melee Weapons, Unarmed Attack, Heavy Weapons, Ranged Weapons)

- Movement
- Survival
- Acrobatics
- Manipulation
- Stealth

► Any Intelligence-based broad skill

- Investigate
- Resolve
- Culture
- Deception
- Leadership

As heroes rise in experience, they acquire a wide variety of skills. The first thing a player does when his hero is confronted with a situation is examine his record sheet to find out which of his skills is appropriate. If the player can come up with a way to make it work and explain it rationally to you, let him try.

Skill Rank Benefits

As characters advance and purchase additional skill ranks, certain skills provide special skill rank benefits. For many skills, this is simply a bonus applied to skill checks that allows for a more dramatic increase in the likelihood of success. Skill rank benefits may also apply a bonus to a hero's resistance modifier, as in the

case of Acrobatics—dodge and Knowledge—deduce.

A second type of skill rank benefit appears in a few skills, such as Melee Attack and other combat skills. Achieving high ranks in one of these skills may allow a hero to make use of the skill in new ways—performing tasks like a double shot. Other examples include cybersurgery, trick riding, and coding new programs.

Purchasing Skill Rank Benefits

Usually, a hero acquires a skill rank benefit automatically. When a certain skill rank is achieved, the rank benefit is obtained. There is no cost, other than the purchasing the skill rank itself, for the skill rank benefit.

It's also possible to purchase certain skill rank benefits before attaining the skill rank at which the benefits would be automatically attained. The procedure and costs for purchasing rank benefits early is described on page 63 in the *Player's*

Handbook. Typically, this is only possible with the second type of rank benefits, as described above—benefits that allow a new task or action. Heroes should not be allowed to purchase rank benefits marked with a "ⓧ" symbol.

As is the case whenever one of your players decides to spend skill points, you have the right to concern yourself with how they are spent. If you don't want to allow a rank benefit to be purchased in advance, be sure to inform your players before they begin planning.

STRENGTH FEATS & SKILLS

Strength measures physical power, efficiency, confidence, and resilience. Strength feats measure bursts of raw power, like breaking down a door, resisting something that knocks the hero down, or lifting a heavy object.

Breaking Things

You can simply use your common sense to decide if something would stand up to the punishment the heroes are dishing out. Or you can track the damage inflicted by the heroes (see "Property Damage," in *Chapter 3: Gamemasters in Action*).

Another option is to allow a hero a Strength feat check to break, smash, force, or snap an object that a human could reasonably break. If you choose the Strength feat check, refer to TABLE G21: BREAKING OBJECTS and apply modifiers for both toughness and durability.

Toughness describes how hard it is to damage something, while *durability* is a measure of how much damage the object can withstand before breaking. Things such as normal doors, furniture, instruments, and appliances have Ordinary toughness; heavy, thick, or reinforced

TABLE G21: BREAKING OBJECTS

Toughness	Durability	Modifier
Ordinary	Fragile	none
Good	Average	+1
Amazing	High	+3

objects such as guns, cars, or cash registers have Good toughness; and exceptionally resistant items such as tanks, vaults, or boulders have Amazing toughness.

◆ **Example:** Mad Dog throws himself through a barroom door. The Gamemaster decides it's an Ordinary object (no modifier) with Average durability (+1 penalty). Mad Dog's player rolls a d20+d6 for his Strength feat check.

Use common sense when allowing the characters to break things. A character might be able to snap the radio antenna off a tank, but he can't harm the tank, no matter what he rolls.

Lifting Objects

A second use of a Strength feat check is to lift or shove something heavy. As a rule, a hero can lift an object weighing up to 5 times his Strength in kilograms as a Marginal feat (no penalty), 10 times as a Slight feat (+1 penalty), 15 times as a Moderate feat (+2 penalty), or 20 times as an Extreme feat (+3 penalty). This is a squat or short hoist of some kind, instead of an over-the-head press. More demanding lifts might be harder: A hero attempting a clean and jerk might suffer an additional +2 penalty to reflect the difficulty of the lift.

Heavy lifts are taxing. You may require characters making heavy lifts to make fatigue checks. See *Chapter 3: Gamemasters in Action*.

ARMOR OPERATION

Generally speaking, untrained characters can't do anything strenuous—including running or jumping—in heavy or powered armor. Noncombat skills may still be available to an untrained character wearing heavy armor. For example, wearing plate mail shouldn't prevent a hero from using Investigate, Resolve, or Life Science, even if the hero has no idea how to wear the armor.

ATHLETICS

Any feat of leaping, climbing, or throwing falls under this broad skill. Think of an Athletics skill check as a measure of the character's Strength in motion—a test of power and precision as opposed to the brute force implied in a Strength feat.

Climb

The Athletics-climb skill can be used in one of two different ways: It can be used within the action round on a phase-by-phase basis, or it can be used in a challenge scene with a complex skill check.

Within an action round, a hero is entitled to a climb skill check each phase that he climbs. He covers 1, 2, or 3 meters in that phase for a Ordinary, Good, or Amazing result. This assumes a fast climb, but if the scene's conducted in rounds, the hero's probably moving quickly.

If the hero is climbing as part of a challenge scene, don't bother to track how far he climbs with each skill check. Instead, assign a number of successes needed and establish a time frame for how often he can attempt the checks. It's assumed that the hero is climbing continuously throughout the challenge scene. You can assign additional modifiers for the difficulty of the climb, special equipment, or weather conditions.

Distance	Successes	Time
1–30 m	2	1/minute
30–100 m	4	1/5 minutes
100–1000 m	6	1/30 minutes
1000+ m	10+	1/hour

Distance is the total length of the climb. *Successes* lists the number of successes necessary to complete the climb. *Time* determines how often climb attempts can be made during the complex skill check.

◆ **Example:** A hero is trying to scale a 300-meter cliff. He'll need to make 6 successes, and he's allowed to check once every 30 minutes. With two Amazing successes, the hero could reach the top in only an hour, but it's more likely to take him three or four hours to complete the climb.

Long climbs are fatiguing; treat them as forced marches for the purposes of making fatigue checks. See "Movement" in *Chapter 3: Gamemasters in Action*. Of course, if it's not important in the current adventure, then don't worry about it.

Remember, a Failure on a climb skill check is not a fall. It's a simple lack of progress. Falls might occur as a result of a Critical Failure, though. See "Falling" in Chapter 3.

Jump

At your discretion, you can assign bonuses or penalties to modify the

hero's check. For instance, a hero with a good running start (10 meters or so) might gain a –1 or –2 bonus to his skill check, while a hero in heavy armor might add his armor's action penalty as a penalty.

Specific Skill

When a player wants his hero to be a great racquetball player or soccer star, purchase of a skill devoted to a single sport is possible. If the hero finds himself trying to do something that resembles his favorite sport—such as a baseball player catching a thrown object—you may allow the hero to roll against this skill.

HEAVY WEAPONS

While the Heavy Weapons broad skill is intended for use of personal arms, you may allow the hero to use his Heavy Weapons skill with loose-mounted vehicular weapons that are trained and fired directly by the user. A swivel-mounted .50 caliber machine gun on the roof of a tank and a recoilless rifle on the back of a jeep are good examples.

If the weapon employs servomotors or is aimed through an electronic sight, it's part of the vehicle and should be fired using the System Operation skills.

MELEE WEAPONS

Several options are available to heroes wielding weapons, including parries, charges, and called shots. See Chapter 3 for more details.

Melee Weapons and its specialty skills may allow the use of certain improvised weapons and dirty tricks. For example, smashing a bottle over someone's head falls into the category of a Melee Weapons-bludgeon attack. Once the bottle is broken, Melee Weapons-blade is probably more appropriate.

UNARMED ATTACK

In addition to the standard attacks to damage an opponent, a hero might choose to overpower his target. Overpowering attacks restrain, pin, or wrestle the target. See "Overpowering" in Chapter 3.

DEXTERITY FEATS & SKILLS

Dexterity defines the hero's agility, hand-eye coordination, balance, and reaction speed. Feats of Dexterity are used to determine how well the hero performs in general tests of coordination or agility, such as catching a thrown object, handling a piece of extremely delicate work, or suddenly changing direction.

ACROBATICS

When a hero attempts a vault, acrobatics training augments athleticism. This means that the player can choose whether to use either Athletics or Acrobatics when attempting a vertical jump, whichever is better. Of course, jump is a specialty skill, and hence uses a +d0 base situation die instead of a +d4.

If the hero has the ability to add additional vertical distance because of several skill ranks in jump, he can still add this bonus distance even if he chooses to make an Acrobatics check instead of an Athletics-jump skill check.

Vaulting and springing requires some kind of ramp, step, or springboard for the hero. For example, a dumpster might serve as a springboard to jump over a fence.

Acrobatics can also be used to entertain. If the hero chooses an acrobatics routine as his method of entertainment, allow an Acrobatics check to provide a -1, -2, or -3 bonus to an ensuing Entertainment skill check. (See the sidebar above on "When Skills and Feats Overlap.")

When this skill is used to walk a tightrope or perform a similar action, a complex skill check is required. The number of successes needed is tied to the distance involved, and the prevailing conditions may provide a modifier to each skill roll. A balance pole gives a -2 bonus, and soft-soled shoes with a good gripping surface add another -1 bonus.

Apply modifiers to take the difficulty of the attempt into account, including wind strength, the condition and size of the line or wire, and the slope to be negotiated. Navigating a 10-cm beam in still air is much easier than walking across a 1-cm wire in gusty wind and rain.

When Skills and Feats Overlap

Sometimes, a character seems to have two ways to accomplish a task. Should a hero use a specific Athletics skill to catch the thrown object, or is such an action a Dexterity feat? Does an expert biologist trying to get information out of a database rely on his Computer Science skill or his Life Science-biology specialty?

In such a case, when only one skill or another can be used, you can dictate which skill (or Ability) is relevant and have the hero make a check against the appropriate score.

In other cases, a hero may have more than one skill that applies, and it's a combination of those skills that determines how well he succeeds. For instance, a gymnast may use Acrobatics and Entertainment simultaneously. A spy may combine Culture and Interaction; a thug uses Street Smart and Deception in combination.

You can reward such a skilled character by allowing both skills to be used in a single action. Let the character decide which skill is primary, and which is secondary. Then, the character makes a skill check using the secondary skill: a successful result provides a -1, -2, or -3 bonus to the primary skill check. No benefits are provided by a Failure result.

Both skill checks occur at the same time: they constitute a single action and don't follow the rules for two actions detailed in the Chapter 3.

Daredevil

Under routine conditions, a Failure result during a daredevil skill check isn't fatal. It's only under hasty, ill-prepared, or truly dangerous conditions that a Failure result could spell disaster. Of course, this skill should not replace a hero's survival instinct or good sense—going over Niagara Falls in a barrel may be possible with preparation, but trying to paddle a kayak over the edge is foolish—the hero probably needs an Amazing success.

The following text includes uses of the daredevil specialty skill. Use the rules for complex skill checks to add tension to important actions. For example, a long hang glider flight or scuba dive might require 6 or more successes to complete.

► **Hang Gliding:** On average, hang gliders travel at about 40 to 60 kilometers per hour. Powered hang gliders, called ultralights, can reach speeds of about 100 kph.

Unpowered hang gliders drop 1 meter in altitude for each 10 meters of forward progress. The pilot can stretch this with a successful skill check; on an Ordinary result, he drops 1 per 20 meters; on a Good or Amazing result, he drops 1 meter per 50 meters of level flight. In the right conditions, it's possible to regain altitude by climbing on updrafts or thermals. Ultralights allow continuous flight and modest ascents.

► **Scuba Diving:** This skill might be used for underwater salvage or

search work, or to stretch the time that a character can stay on the bottom. With standard scuba gear, deeper dives reduce the time the hero has on the bottom—it might be possible to stay down for an hour or longer at depths of 10 or 20 meters, but a 100-meter dive might only allow 10 minutes. Naturally, specialized or advanced deep-dive equipment might extend this limit.

► **Sky Diving:** Remember that a Failure result doesn't necessarily indicate disaster. Under good conditions, a Failure result on a normal jump means that the skydiver lands badly, sustaining damage as for an Extremely Short fall (see "Falling" in the previous chapter); a Critical Failure means that the parachutist suffers damage for a Short fall.

Some parachute jumps are considered high-risk jumps. Characters without the daredevil skill or guidance from someone with it are considering to be engaging in high-risk jumps. Other high-risk jumps include night jumps, jumping from buildings or cliffs, and low-altitude jumps of 500 meters or less.

In a high-risk jump, a Critical Failure means that the chute doesn't open, with the expected catastrophic results—a fall in which the falling object reaches terminal velocity.

In a high-risk situation, a Failure result on a daredevil skill check inflicts damage for a short fall, and an Ordinary result inflicts damage for an extremely short fall.

Defensive Martial Arts

In addition to the standard attacks to damage an opponent, a hero using this skill may choose to block or make other special attacks, including knockdowns. See "Melee Combat" in *Chapter 3: Gamemasters in Action*.

Dodge

Any hero can use *dodge* to make himself harder to hit, but unless he has the *Acrobatics* skill, the attempt is an untrained skill check.

Until a hero begins dodging, no defensive effects are gained. For example, a character who doesn't *dodge* until the Ordinary phase of an action round gains no benefit if targeted by an attack during the Amazing or Good phase. The reaction *dodge* rank benefit allows dodging to take effect before the normal result of an action check, as described in the *Player's Handbook*.

Normally, using *dodge* requires an action, preventing the hero from doing anything else in the phase in which he makes his *dodge* skill check. After 3 ranks in the *dodge* skill are purchased, the hero can perform a second action in the same phase with a +2 penalty.

Hitting the deck is a special form of *dodge*. A hero caught in the blast radius of an area-effect weapon is allowed an *Acrobatics-dodge* skill check to attempt to reduce the damage by one grade (Amazing to Good, Good to Ordinary, or Ordinary to none). For example, if a hero happened to be caught in the Good damage radius of a grenade, a successful *dodge* skill check reduces the damage to Ordinary.

Fall

While the *Acrobatics-fall* skill allows characters to improve their chances of a good landing after a fall, not all heroes have this skill. When an untrained character falls, he can make a *Dexterity* feat check.

Complete rules on falling damage and speeds are found in *Chapter 3: Gamemasters in Action*.

Flight

A hero flying under his own power, such as a *sesheyan*, might be knocked unconscious while in the air. Naturally, the hapless character begins falling immediately.

MANIPULATION

This skill can be used to disarm simple traps activated by mechanical triggers, like tripwires, pressure plates, or shifting weights. Electric eyes or electronic sensors are covered by the *Security* skill, and fuses or bomb mechanisms fall under the *Demolitions* skill.

Simple traps can be described by the same criteria as a lock. Use the standard modifiers and complexity ratings for a complex skill check. Of course, the hero must know of the trap's existence before he can disarm it—an *Awareness-perception* or *Investigate-search* check is usually necessary to spot the tripwire or hazard before the character sets it off.

In addition to disarming simple mechanisms, *Manipulation* can also be used to rig traps of this sort. The degree of the hero's success in setting the trap governs the quality rating for the next person to come along and disarm it; the complexity depends on the materials the character has to work with and the amount of time he spends on it.

Lockpick

A bobby pin, heavy-gauge wire, or nail file are the minimal tools necessary to use this skill; the hero has to have something on his person that he can fit into the lock. Good tools (-2 bonus) would include specialized files, picks, and hooks for picking locks. Amazing tools (-3 bonus) include fiber-optic scopes for viewing the inside of the lock, ultrasonic transducers to find tumblers, magnetic manipulators, X-ray machines, and similar high-tech gear.

Pickpocket

If a character randomly picks another's pocket, allow the character to find \$5 to \$60 (5d12) per wallet. It takes about 10 to 15 minutes to set up a reasonable attempt . . . but people notice they've been pickpocketed eventually, and a character who practices this trade for too long in one place may find irate victims coming back to look for him. Small towns or thinly populated areas are especially dangerous; mysterious strangers are likely to come under suspicion quickly. Heroes who spend too much time on the wrong side of the law should be caught.

Prestidigitation

This skill can be used for minor feats of contortion or escape, such as getting out of simple bonds, slipping out of handcuffs or straitjackets, and similar stunts. Such tasks are significantly more difficult than mere sleight-of-hand; the hero suffers a +1 penalty for Good bonds (well-tied ropes) or a +3 penalty for Amazing bonds (a chained straitjacket).

RANGED WEAPONS, MODERN

Details of using this skill in combat are covered in *Chapter 3*, under "Ranged Combat."

RANGED WEAPONS, PRIMITIVE

Weapons of this sort are susceptible to minor breakage. On a Critical Failure, a bowstring snaps, the weapon misfires and must be cleaned, or some other inconvenient malfunction occurs. See "Weapon Breakage" in *Chapter 3*, which also contains details on use of this skill.

STEALTH

A player with a good plan for distracting an enemy or concealing his hero shouldn't be penalized by repetitive untrained *Stealth* checks. Reward a quick-thinking player by giving him an automatic success when he earns it, instead of allowing an unfortunate die roll to ruin his well-thought-out plan.

This skill may be useful in setting up an ambush. If the hiding character attempts an attack before he's spotted, see "Surprise" in *Chapter 3: Gamemasters in Action*. The success of the ambusher's *Stealth* check imposes a penalty on the opponent's *Awareness* check to avoid being surprised.

Hide

Background and environment matter greatly in an attempt to hide. Decide if the circumstances offer Ordinary (-1 bonus), Good (-2 bonus) or Amazing (-3 bonus) cover or darkness for the hiding character. Backgrounds without any cover may apply a +2 penalty.



Breaking before entering

Shadow

Long-term covert surveillance falls under this skill. The same situation bonus described under *hide* applies to the shadower's skill checks; it's easy to shadow without being seen if lots of cover and background are available. You may ignore the Will resistance modifier of a shadowed character if the target is distracted.

Sneak

Just as *hide* can set up a surprise situation, the successful use of the *sneak* skill can do so, too. See "Surprise" in Chapter 3.

VEHICLE OPERATION

In addition to combat driving or piloting, Vehicle Operation is also used for attempting stunts or risky maneuvers outside of combat. Taking a car cross-country or landing an aircraft in a bad storm are examples. Additional information on vehicles, spaceships, and the use of this skill can be found in *Chapter 10: Vehicles* and *Chapter 11: Spaceships*.

CONSTITUTION FEATS & SKILLS

Constitution feats are used to resist hazards such as fire, lightning, or poison. The result of a Constitution feat check determines how much damage a character exposed to a hazard suffers. For more complete rules and examples of hazards, refer to "Hazards" in Chapter 3.

MOVEMENT

The Movement skill allow characters to increase the distance they can travel in a set amount of time before making Stamina-endurance checks; see "Movement" in *Chapter 3: Gamemasters in Action*.

Race

One way to administer a race between characters is to use the "Character vs. Character" rules in Chapter 3. Allow both sprinters to roll a Movement-race skill check; the character with the higher degree of success wins the contest.

Swim

Heroes without this skill can't do anything more than tread water. The movement rates for swim and easy swim only apply to characters who have purchased the swim specialty skill.

To administer a swimming contest, you can use the rules for *race*, above.

Trailblazing

Heroes without this skill suffer penalties to their Stamina-endurance checks when traveling in rough terrain or adverse conditions. Successful use of *trailblazing* can only negate the penalties caused by terrain or adverse conditions; *trailblazing* cannot provide a bonus to Stamina-endurance checks.

To administer a contest of overland movement, you can use the rules for *race*, above.

STAMINA

The Stamina skill has three major roles in the game: First, it measures how easily a hero can avoid knock-out after taking damage; second, it measures how long a character who

has suffered mortal damage survives; third, it allows a hero to push on through physical exhaustion or hostile terrain.

The effects of damage, exhaustion, and exposure are discussed in *Chapter 3: Gamemasters in Action*.

SURVIVAL

The most critical concern in survival is the atmosphere. If the hero has respiration gear or is in an atmosphere that can be tolerated, odds for survival improve measurably.

Discussion of environments is found in *Chapter 3: Gamemasters in Action*.

You may allow the result of a Survival skill check to apply modifiers to Stamina–endurance checks caused by hazardous environments as follows: Critical Failure, +2 penalty; Failure, no modifier; Ordinary, –1 bonus; Good, –2 bonus; Amazing, –3 bonus.

INTELLIGENCE FEATS & SKILLS

An Intelligence feat check may be used as a measure of the hero's reasoning ability in abstract situation, such as assembling a puzzle or solving a maze. The complexity of the puzzle, maze, or leap of reasoning required may add bonuses or penalties to the Intelligence feat check.

◆ **Example:** An alien artifact flashes weird lights at Captain Raines in a detailed sequence, changing with each repetition. The player realizes that Captain Raines has to predict the next sequence to solve the riddle. You could draw up a puzzle for the player to solve, or you can let the player make an Intelligence feat check for Captain Raines.

Tests of memory and learning

should be rolls against the hero's Knowledge skill. It's a good measurement of how much a hero knows.

Keep an eye out for fields of knowledge that a hero may have special expertise in—if you're trying to see if the hero knows anything about nuclear reactors, it might be more appropriate to have the player roll against his character's Physical Science or Technical Science skills instead of Knowledge. If the character doesn't have either of these skills, there's no reason you can't have him roll an untrained skill check against one of these instead of Knowledge.

The list of Intelligence skills in the *Player's Handbook* can't be considered to be comprehensive of all knowledge that humans and aliens can accumulate. Individual campaign settings may demand different skills. Feel free to add new specialty skills to the broad skills listed, and even create new broad skills.

BUSINESS

This skill performs several functions. First, it describes the level of expertise of mercantile and corporate characters. Characters with several ranks in corporate have a good working knowledge of how a corporation operates, and how it can be manipulated. Business can be especially important in campaigns based on operating trade routes or money-making.

In appropriate situations, Business is an encounter skill that can be used just like Interaction. Don't neglect the possibility for roleplaying and interaction between characters. Guidelines for the rewards of buying and selling appear in TABLE G22: BUYING & SELLING.

Corporate

Large-scale trading and commerce utilize this skill. Here, finance works on a grand scale of mergers, acquisitions, and millions of dollars of as-

sets. Unless a hero has found a significant source of capital, it's impossible to use the corporate skill directly in his own interest; it's assumed that the hero's playing with his corporation's money, and exacting only a tiny fraction of the sums involved for his own reward or commission.

Big business moves slowly. If a hero devotes his time to managing his business fortunes, he may make a skill check once per quarter to see how he fared. However, opportunities or deals may come up at any time you desire.

Illicit business

Trading in illicit goods, contraband, and black market materials has risks and dangers. The law level (see *Chapter 14: Campaign Architecture*) of the area may add penalties to the character's attempts to deal under the table. A Critical Failure result is likely to lead to the character's arrest or a violent confrontation with other criminals.

This skill is also useful for fencing stolen property. Since the underworld never pays retail, the degree of success on a Business–illicit business skill check determines how much a character receives for ill-gotten gains:

Result	Return
Critical Failure	5% of value
Marginal	10% of value
Ordinary	30% of value
Good	50% of value
Amazing	80% of value

Small Business

The *small business* skill works like the corporate skill, but it's much more likely for a hero to manipulate personal fortunes with this skill. If he needs to swing \$500 or \$10,000 transactions to stay in business, he can do so. Since the character is working with his own money, he can keep

TABLE G22: BUYING & SELLING

Skill Result	Buying	Selling
Critical Failure	100% + (d20 × 10%) of cost	100% – (d8 × 10%) of cost
Marginal	100% + (d4 × 10%) of cost	100% – (d4 × 10%) of cost
Ordinary	100% – (d8 × 1%) of cost	100% + (d8 × 1%) cost
Good	100% – (d20 × 1%) of cost	100% + (d20 × 1%) of cost
Amazing	100% – (d4 × 10%) of cost	100% + (d4 × 10%) of cost

The Trader Campaign

One popular model for science fiction is the trader campaign, where the heroes take on roles as interstellar merchants. If this is your kind of game, don't allow the Business skill to replace roleplaying and ingenuity on the part of the players. Set up adventures for the heroes to obtain valuable goods, convey them through the galaxy, and sell them at interesting markets. If a player hits on a good plan, reward him; if he's plodding along, letting the dice make his money, throw a monkey wrench into the works and make the game more interesting.

every dime he makes with this skill—or fund every loss.

COMPUTER SCIENCE

Knowledge—computer operation allows a character to use her computer and its software efficiently. This broad skill and its specialty skills allow a more complete and thorough understanding of computer systems and how to manipulate them.

Information retrieval is described in Chapter 10: Computers in the Player's Handbook.

Hacking

Sensitive systems may have watchdog systems and human defenders. When a hacker tries to crack the system, electronic warfare may begin. Even if a system operator isn't online to counter the hero, special watchdog programs or attack routines may await the character.

Hardware

This skill reflects a character's skill at computer engineering and hardware design. You may also allow characters to construct customized hardware for a specific purpose; in this case, the customized hardware provides a -1, -2, or -3 bonus, depending on the success of a Computer Science—hardware skill check.

Programming

The primary function of this skill is to allow a character to create or modify any of the programs mentioned in

Chapter 10 of the *Player's Handbook*. Just how difficult this is, and how long it takes, are largely a function of your campaign setting. In a setting that's just introducing computers, it may be a task of months or years as a hero attempts to fashion a bug-free piece of software. In a setting where artificial intelligence is common and computers have been around for centuries, detailing a new code may take only a few minutes.

DEMOLITIONS

During a complex skill check, the conditions refer to the general toughness or resilience of the object to be wrecked. For example, a bank vault is an object of Amazing toughness, so setting a charge to damage it receives a +3 penalty. At your discretion, setting charges in dangerous circumstances—such as hanging from the underside of a bridge with your bare hands—might impose further penalties on attempts to set explosives.

When an explosive goes off, it's treated like an area-effect weapon. See "Prepared Explosives" in Chapter 11: Weapons & Armor in the *Player's Handbook*.

KNOWLEDGE

Don't allow Knowledge skill checks to replace good roleplaying and clear thinking on the part of your players. Knowledge checks are best used to simulate information that a hero has access to that the player doesn't—often this is information specific to the campaign, its current events, or its history.

Don't allow Knowledge to replace other skills. If a player wants to know about military tactics of an enemy, it's much more appropriate to make a Tactics or Culture skill check—even if it's untrained—than it is to make a Knowledge check.

Computer Operation

As long as a character is using a computer for basic tasks—such as accessing free information or using basic software—no skill check is required. For example, even a hero with no computer skills can book a vacation on a computer designed to assemble travel plans. On the other hand, getting a really great fare might require a skill check. Don't let

skill checks take the place of intelligent play and attention to detail on the part of the players.

Many computer programs provide one of two benefits: They either add a bonus to the hero's own skill check, or they allow the hero to use the computer's skill score in place of his own for any relevant skill checks. For example, a computer with the appropriate Science program can provide a bonus to skill checks.

Deduce

This skill can be used to produce a theory of what happened when, and why. Using this skill, a character can attempt to reconstruct the general sequence of events and positioning of major pieces of a puzzle. In scientific matters, the deduce skill allows the scientist to come up with a basic theory or observation that fits the facts.

Language

Work with each player to make sure that she selects a language for her hero. Depending on the nature of your campaign, you may have to provide some information to the players about what languages are available.

It's also up to you to decide exactly how divided the linguistic history of your campaign has become. Do hundreds of languages and dialects exist? Can a hero with knowledge of an Italian understand ancient scripts of Latin? Or, in the distant future, has a universal language taken hold?

Specific Skill

Feel free to create new Knowledge specialty skills; examples include cooking, fishing, model building, or science fiction roleplaying. You should consider whether a Knowledge specialty skill you create should instead fall under another skill. For example, the study of drive-space physics might be more appropriate to Physical Science.

The more specific the field of study, the more information a character should have on the topic. For example, if a character selects world history, it should be more difficult for him to retain information about the Alamo than for the character who selects United States history or Texas history. Apply bonuses or penalties as you feel appropriate.

LAW

Your heroes are likely to run afoul of the law from time to time, especially if they're not sanctioned by a recognized authority. Remember, the skill can work for law enforcement officers, vigilantes, and even villains.

► **Avoiding Arrest:** One use of law enforcement procedures is to persuade law officers on the scene not to arrest the heroes. The more serious the crime, the more difficult this task becomes:

Crime	Modifier
Minor violation	-2 bonus
Misdemeanor	none
Nonviolent felony	+1 penalty
Violent felony	+3 penalty
Heinous felony	+5 penalty

► **Bond Hearings:** If a character is arrested, court procedures may help to persuade the judge to post a light bail. Modify the hero's situation die according to the severity of the crime, and make a skill check:

Success	Bond
Critical	Incarcerated
Failure	without bond
Marginal	High bail (\$50,000 or more)
Ordinary	Moderate bail (\$10,000)
Good	Low bail (\$2,000)
Amazing	Released on own recognizance

► **Custody:** Heroes and villains can use law enforcement procedures to convince the local constabulary to take a person into custody, a handy way to make sure that captured villains don't go anywhere.

► **Evidence:** Characters who can justify their interest can use either Law specialty skill to obtain access to official evidence.

► **Protection:** With a successful check against either Law specialty skill, a character can convince the local authorities to provide police bodyguards, surveillance, or protection for someone clearly in danger.

► **Warrant:** Successful use of either skill can allow a character to get a warrant to arrest a specific individual or search a private area.

LIFE SCIENCE

In addition to providing knowledge and information, this skill also reflects the hero's ability to perform experiments, correlate data, and

manage scientific resources. If the heroes need to know how many red-tailed hawks are infected by a mysterious disease, someone with the Life Science skill could design a plan to catch and examine the hawks and monitor existing populations.

Genetics

Genetic study and experimentation is equipment-intensive. It takes fantastically precise (and expensive) instrumentation to perform DNA scans, study chromosomes, or attempt to genetically engineer organisms. Otherwise, a geneticist is limited to observing inherited traits and targeting specific characteristics through selective breeding programs.

With Ordinary lab equipment, a scientist can study chromosome patterns, chart DNA, and search for specific genetic markers.

With a Good lab, a geneticist can engineer organisms during their earliest growth stages by inducing specific mutations or improvements. In short, it becomes possible to create mutant characters. The frequency, legality, and morality of this tampering is left to your discretion.

With an Amazing lab, a geneticist can engineer mature organisms, altering their genetic structures and inducing mutations. This is an extremely debilitating treatment that incapacitates the subject for months on end. Again, the ethical questions are completely up to you.

Xenology

The more exotic the species, the harder it is to make informed guesses about its physiology or behavior; a creature that breathes chlorine or hydrogen should be more difficult to study than an oxygen breather. Apply modifiers as you see fit.

MEDICAL SCIENCE

Rules for using this skill to treat damage and disease are described in Chapter 3: Gamemasters in Action.

Forensics

Evidence gathered at a crime scene can be analyzed with forensics to produce worthwhile information. The quality of the evidence affects the doctor's forensics skill check; Marginal evidence applies a +2 step penalty, Ordinary evidence no bonus,

Good evidence a -1 bonus, and Amazing evidence a -3 bonus.

In general, here's the type of information that a Medical Science-forensics skill check might yield:

Marginal Success: Victim's blood type, obvious cause of death.

Ordinary Success: Indirect cause of death, identify wounds received before and after death, minor evidence about attacker (size, dress, hair color).

Good Success: Subtle or unexpected cause of death, identify murder weapon, detailed facts about attacker's appearance or dress.

Amazing Success: Disguised or deliberately altered cause of death, exacting information about attacker's identity.

Psychology

The psychology specialty makes possible the treatment of extraordinary stress and sustained mental injury. It includes a familiarity with hypnosis and therapeutic techniques. Use a complex skill check, allowing the psychologist to generate successes once every week or month as appropriate.

Decide if the subject is suffering from Marginal, Slight, Moderate, or Extreme mental trauma. The severity of the trauma generally reflects the degree to which the person is incapacitated or varies from behavioral norms. A person with mild claustrophobia has a Marginal trauma, while a ruthless psychotic or hopeless catatonic is suffering from an Extreme mental affliction. The severity of the illness determines the number of successes required to effect successful treatment.

It takes time to work through psychological trauma. At best, a psychologist might be allowed one skill check per day to deal with minor problems, but one per week, month, or year for more serious issues.

Surgery

In addition to its obvious uses to heal wound and mortal damage, knowledge of this skill allows a character to perform any number of surgical procedures both necessary and cosmetic.

Treatment

Successful use of treatment can assist characters suffering from disease, poison, and radiation exposure; see Chapter 3.

NAVIGATION

Under routine conditions, trained navigators don't make skill checks. It's simply a part of the trained navigator's job. Only call for a Navigation skill check when it involves an important aspect of the story or when an untrained character attempts to use the skill.

PHYSICAL SCIENCE

A hero with this skill is qualified to design, implement, monitor, and analyze experiments of various sorts. If the heroes need to find out why a colony's being subjected to ionizing radiation, a physicist can develop a way to deploy sensors and instruments to determine the source and intensity of the radiation. Once analysis is complete, the scientist can probably suggest ways to shield against or suppress the radiation.

Astronomy, chemistry, physics, and planetology aren't the only specialty skills under Physical Science. Allow the addition of other specialty skills, such as geology or meteorology, as appropriate.

SECURITY

Members of your supporting cast can use Security as often as the heroes. For example, an enemy outpost can become a major challenge if protected by a few electronic sensors, robot guns, and a few guards with a good security plan.

Protection Protocols

One use of this specialty skill is to secure a person instead of an area. If a bodyguard intends to protect a high-profile celebrity, he can use this skill to coordinate the efforts of a security team, monitor crowds, and scan the planned travel route.

Security Devices

Items placed by the use of this skill can be circumvented in a number of ways. Physical security devices, such as tripwires or pits, can be bypassed by the use of Security or Manipulation. Electronic security devices might be defeated by a character with Security or Computer Science. If the security device involves an explosive of some kind, a hero might also be able to use Demolitions to disarm it.

Use complex skill checks to both

set and bypass security devices. The degree of success achieved by the character who installed the system determines the complexity of bypassing it. For example, if the original installer built an Amazing security system, anyone who wants to get around it needs at least 8 successes to do the job.

SYSTEM OPERATION

System Operation isn't limited to a single device or platform. Whether a character is using radar aboard a yacht, a mass detector on a spaceship, or a hand-held sensor gauntlet, System Operation—sensors is the appropriate skill.

The primary purpose of this skill is to give each hero an important role during space combat. See *Chapter 11: Spaceships*. Encourage each player to develop his hero's skill at a different position, so that everyone can participate.

TACTICS

If a player develops a plan that makes sense—such as using cover to approach a bunker, setting up an ambush with support troops, flanking enemies, driving them to the ground with a couple of grenades in order to cover a charge—allow the tactical advantage to persist as long as the character would logically have the tactical advantage.

You may allow Tactics to provide a bonus to an ally instead of a penalty to an enemy. For example, if the tactician directs a companion to move to a position from which he can fire on the enemy's flank, it's reasonable to grant the firing character a bonus. In other instances of group tactical coordination, it may be more appropriate to apply a bonus to the heroes' action checks.

Tactics is useless if the tactician has no way to convey his insight or if no one pays attention to his advice.

TECHNICAL SCIENCE

This broad skill is necessary for designing and repairing special equipment, machinery, or instrumentation for various purposes. For example, a hero might be able to use his Physical Science skill to determine that a neutrino beam can penetrate the

alien force field . . . but designing and building a neutrino stream projector requires Technical Science.

You may allow specialty skills other than *invention*, *repair*, and *technical knowledge* to represent particular areas of study, such as *electronics*, *mechanics*, *cybernetics*, or *robotics*.

Invention

This specialty skill covers the manufacture of parts, tools, or simple devices. For example, a hero might need to make an antenna dish to replace a damaged one, forge a connecting rod to replace a damaged one, or even assemble a working vehicle by bolting an engine to a chassis and rigging some basic controls.

Juryrig

In a combat scene, an item repaired by the use of the *juryrig* skill usually remains functional for a number of rounds. Outside of combat, juryrig repairs can last for a number of hours. Allow juryrigged materials to function as long the story demands.

Repair

Repairing stun damage is a task of Ordinary complexity, requiring only 3 successes. Skill checks to build up these successes can be made once per round.

Repairing wound damage is a task of Good complexity, requiring 4 successes. If the wound damage hasn't exceeded half the total wound points of the object being repaired, skill checks to build up these successes can be made once per minute. If the wound damage has exceeded half the total wound points of the object being repaired, skill checks to build up these successes can be made once per hour.

Repairing mortal damage is a task of Amazing complexity, requiring 8 successes plus 1 additional success for every point of mortal damage. Attempts to repair mortal damage can be made once per day.

For any use of the *repair* specialty, work must be performed continuously—a hero is only entitled to a dice roll if he has used the skill exclusively and not performed any other actions during the specified time interval. You don't have to enforce this rule rigidly; for instance, if a hero is just about to finish a full day of work on a repair job involving mortal damage and is forced to inter-

rupt his work for a few minutes to deal with an enemy attack, he shouldn't have to forfeit all the work he has put in during the day.

If an object or system is destroyed by mortal damage, the hero may have to use *invention* or *juryrig* to manufacture replacement parts by machining new components or scavenging similar parts.

Additional characters helping the supervisor of a repair effort can provide bonuses; see "Assisting Actions" in *Chapter 3: Gamemasters in Action*.

WILL FEATS & SKILLS

Will feats are uncommon; tests of willpower are part of the Resolve skill. There are only a few instances when a Will feat check is the best approach. Tests of character reading, moral judgment, or emotional stability are examples.

ADMINISTRATION

Modern society is full of administrative organizations and procedures, and a hero who knows how to make the wheels turn can be an invaluable asset to the party.

► **Equipment Requisition:** Heroes with an allegiance to an organization can use this skill to requisition resources. If the heroes want to take expensive survival gear on their next reconnaissance mission, a timely requisition might be the difference between life and death.

► **File Access:** Investigators can find interesting information in public and private records. Real estate transactions, arrest records, health records, building plans, and court transcripts are a few examples.

► **Logging Claims:** A band of heroes might strike it rich by discovering a mineral-rich asteroid, a drifting hulk that can be salvaged, or alien technology that can be patented. Without legal registration of these finds, anyone can take advantage of the heroes' good fortune.

► **Passports and Visas:** International and interstellar travelers will find it advisable to obtain passports to travel abroad and visas to remain in other countries.

► **Weapon Permits:** Carrying an unlicensed handgun is a great way

to end up incarcerated. Permits for Common weapons are considered Ordinary requests; permits for Controlled weapons are Good requests; and permits for Military weapons are Amazing requests. Naturally, a hero with a criminal record has a harder time obtaining weapon permits.

Animal Handling

Specific animal types covered by this skill include apes, dogs, dolphins, elephants, horses, and falcons. More exotic creatures such as bears or great cats are usually trained for entertainment purposes.

Animal Riding

No skill checks are necessary unless a hero is doing something unusual. Checks are required when a mounted hero leaps over obstacles, gallops over dangerous terrain, or directs the mount in combat. A mount of extraordinary quality might provide a significant bonus to riding checks; Good mounts grant a -2 bonus, and Amazing mounts provide a -3 bonus to the rider's checks.

Horses are described in *Chapter 17: Creatures & Aliens*, along with a selection of other animals the heroes are likely to encounter.

Animal Training

You can decide whether a specific animal or alien can be trained. As a general rule, an animal must possess rudimentary intelligence in order to be trainable, but sentient or self-aware creatures can't be trained with this skill.

AWARENESS

The Awareness skill governs a hero's chance of being surprised. It also acts as a measure of the character's perceptiveness when there's something he might notice without conducting a thorough search. (If he is definitely looking for something, he's using the Investigate-search skill.)

Use common sense when considering if an Awareness check is necessary. If a hero's walking down a sidewalk, he might not take notice of passing cars or people who are out and about. If he found himself in the middle of a riot, he'd start paying a lot more attention to his surroundings, looking around to see if anyone was thinking about cracking his

skull. As a rule, heroes notice buildings they might enter, things on fire, and people with unconcealed firearms.

For more information on surprise and modifiers that may affect awareness, see "Detection" and "Surprise" in *Chapter 3: Gamemasters in Action*.

Intuition

Awareness-intuition represents the hero's chance to avoid surprise from sudden attacks, unexpected encounters, and so on. Use this skill check when a player doesn't know that his hero is walking into trouble, but the hero might pick up some inkling of the approaching danger.

Perception

Awareness-perception reflects a hero's ability to notice things he might miss on casual observation—a tripwire, an ambush waiting to be sprung, or a clue that's not obvious.

CREATIVITY

Creativity and its specialty skills can add color and depth to a character without necessarily coming into heroic use. For example, the holographic illustrator who has become involved in a heroic adventure probably isn't going to use his Creativity-holographic illustration skill very often. Examples of Creativity specialty skills are provided below.

Illustration

While primarily used for the creation of art on a two-dimensional surface, this skill might be used to create forgeries or fakes, if the character has an excellent model to work from.

Photography

A character with this skill can use his knowledge to rig trick shots, detect unusual characteristics in photographs, and build improvised cameras or darkrooms.

Writing

In the absence of a live interview or conversation, a piece of good writing may be able to substitute for the use of an Interaction skill. For example, a Diplomat might be unable to meet with the colony president in person, but if he frames his Interaction-intimidate attempt in a memo, he can achieve the desired result.

Of course, it's sometimes difficult

to interact as successfully in writing. The result of a Creativity-writing skill check applies a modifier to the associated encounter skill: Critical Failure, +4 penalty; Failure, +2 penalty; Ordinary no modifier; Good, -1 bonus; Amazing, -2 bonus.

Investigate

There are three frameworks for the use of the Investigate skill—fast, moderate, and careful.

Fast investigations occur when a hero gives an area a rapid once-over, trying to spot obvious clues. The hero's not going to find invisible powder burns on the wall, or an impression left by a pencil on a pad of paper; he's cataloging the obvious facts. Is there a body? A murder weapon lying around? Was the door broken down or the window broken?

In scientific investigations, a fast search details the basic facts of the scene or phenomenon. Did the subject affect its physical environment? Did it leave physical evidence behind? What can be learned from it?

Moderate investigations take more time. Now the hero is looking for every piece of evidence available: dusting for fingerprints, looking for bloodstains or powder burns, checking to see who had access to the area, tracking down credit authorizations, and rounding up witnesses.

A moderate scientific investigation involves detailed analysis of readings on the scene, examinations with sensitive instruments, and serious theorizing about the cause of the phenomenon or occurrence.

Careful investigations may take days or weeks. Every piece of evidence is given a full examination, and every suspect is interrogated or tailed as the circumstances warrant.

Careful scientific investigations may involve experiments designed to confirm theories, precision charting, computer modeling, study of the most minute local details, and extended observation of the site.

Interrogate

A hero targeted by this skill may be required to succeed at a Resolve skill check in order to avoid spilling information. Interrogation takes time (becoming a complex skill check) if the interrogator wants to check on facts, set up traps, and try to catch the subject in lies.

Search

This skill governs any detailed and thorough examination. The systematic nature of a search distinguishes it from the use of Awareness, which covers casual observations.

This skill also governs the collection of evidence and clues, which may make subsequent Knowledge-deduce efforts easier.

Track

Track represents the hunting aspect of Investigation. In fast investigations, it allows a hero to follow a physical trail over a short distance (or as long as the trail remains readable). In moderate investigations, *track* is used to check out likely avenues of escape, hiding places, or destinations for the perpetrator. The goal is to establish the whereabouts of a known individual or suspect.

A second use for *track* is in a careful investigation. Here, the character begins a systematic search that goes far beyond following footprints. The tracking character can follow credit reports, financial transactions, transport logs, and witnesses to hunt down his quarry.

RESOLVE

In general, you shouldn't force players to roll dice to see what their heroes do. If a player announces that his character is going to throw himself on the grenade to save his buddies, or that he's not going to break under torture no matter what, no Resolve check is necessary.

On the other hand, you can call for a Resolve check when you think that the player is abusing the realism of the game.

Mental Resolve

This specialty skill assists acts of courage, moral certitude, and willpower. Intensive interrogation and emotional pressure should operate against this skill.

Physical Resolve

Many *physical resolve* checks are not optional. Players whose heroes are trying to recover from unconsciousness or press on through extreme exhaustion can't simply decide that their heroes succeed automatically. This specialty skill is used to recover from knockout and damage.

Any hero can stand up to general

abuse—a roughing-up by the villain's thugs and threats against loved ones. However, serious attempts to break the hero's will call for Resolve checks. In general, *Resolve-physical resolve* checks are made once every hour for intense torture, or once every week for torturous circumstances or conditions.

Street Smart

Street Smart can sometimes be used to enhance another skill, such as Interaction, Deception, Business, or Stealth. In such a case, the result of the Street Smart skill check applies a modifier to the second skill check: Critical Failure, +2 penalty; Failure, no modifier; Ordinary, -1 bonus; Good, -2 bonus; Amazing, -3 bonus.

Criminal Elements

Use of this skill can enhance Investigate, Deception, or Interaction attempts against shady characters of a specific criminal group or society.

Street Knowledge

When the hero is dealing in his area of expertise, the *street knowledge* skill can enhance the use of Investi-

It's Your Game

It's part of a horror game to frighten heroes out of their wits or overwhelm them with revulsion. To test a hero's resistance to fear and will-draining events, use a Resolve check.

Events that may cause mental or emotional trauma include:

- ▶ Death of a friend or companion
- ▶ Severe injury to a friend or companion
- ▶ Deliberate displays of shocking violence, cruelty, or ruthlessness
- ▶ Unexpected betrayal
- ▶ Invasive mental assault
- ▶ Hideous, frightening, or disgusting aliens

Use your discretion. If the heroes hire a stranger as a guide, they'll be upset if he suddenly turns on them, but they won't be crushed. If a trusted companion turns out to be a mind-controlled clone, use a Resolve skill check.

gate-track and encounter skills such as Interaction. You may use this skill to provide information to the player. If the hero keeps his ear to the ground, you can allow skill checks to pick up rumors and information.

TEACH

Interludes and long periods of travel are opportunities for heroes to train and practice with one another. For example, if the heroes are traveling through drivespace for five days with nothing to do, they can read, spar, and run computer simulations. Because of this, there is no hard and fast rule about how long it takes to teach someone; use your best judgment, but generally don't allow a hero to gain more than one skill rank per adventure in this fashion.

Remember, the cost of a skill can't be reduced below 1.

PERSONALITY FEATS & SKILLS

Personality feats are moderately uncommon. Skills exist to handle most forms of interaction between characters. General dealing with people uses Interaction, tests of etiquette and breeding fall under Culture, fiery and impassioned speeches are

handled with Leadership, swindles and cons belong in Deception.

If a hero simply asks a friend for a favor rather than attempting to persuade or manipulate, a Personality feat check is perhaps the best measure of success.

A feat check could also be a measure of what a supporting character thinks of a hero who hasn't tried to employ encounter skills on him. How much loyalty does the ally or the employee feel for the hero? The hero's own actions should be the primary gauge, but if the players haven't said much about how they're treating the supporting characters around them, a Personality feat check is a reasonable way to find out what kind of impression they've left.

There's no definite way to measure just how lucky a hero is, but a Personality feat check is a close approximation. On occasions when you don't know if the villain drops a rope off the cliff where a hero desperately clings to life, allow the hero a Personality feat check to see if the rope happens to land nearby.

CULTURE

Like Street Smart, Culture can be used to enhance a primary skill such as Interaction or Business. For example, a hero about to use the Business skill to set up a trade deal with an alien colony might take advan-

tage of knowledge of that colony's culture.

DECEPTION

Some frauds take a while to develop. A hero who wants to create a slow-moving swindle by visiting a mark several times a week for a month, baiting the hook, building trust, and setting up the take could use a complex skill check to build the swindle.

Bluff

The use of *bluff* can include attempts to assume someone's identity or pose as another person for a while.

Bribe

The size of the bribe offered may help the initial attempt to succeed. The going rate for bribes varies widely according to situation, but a guideline appears below.

Bribe	Examples
\$100	Low risk, minor infraction
\$500	Low risk, ordinary infraction
\$2,000	High risk, serious infraction
\$10,000	Grave risk, deadly infraction

Risk is the risk to the person receiving the bribe. The *infraction* is a measure of what it is that the hero is asking the recipient to do or allow to happen. High-profile individuals tend to require hefty bribes.

Gamble

Each purchase of this specialty skill indicates knowledge of a single game or type of game; it's up to you whether to allow a skill to be as broad as card games or as narrow as stud poker.

If a hero attempts to augment his personal fortune through repetitive wagering and gambling, it's okay to reduce the efforts of a day or a week to a single skill check.

ENTERTAINMENT

The Entertainment skill can provide a source of income or may find unusual use in some circumstances. (For instance, the act specialty may be used in conjunction with an attempt at Deception.) The amount of money the hero earns depends on the quality of his performance and the general circumstances of his audience. A large audience of wealthy people might provide an actor with

Personality Skills vs. Heroes

Sometimes, the villain uses a soft voice instead of a firearm. Deception or Interaction skills are used against heroes. What happens then?

The best thing to do is allow the players to roleplay freely. Players can't be coerced into choosing to turn on their friends, walk into obvious traps, or completely ignore their common sense and ethics. But if a player believes that his hero might fall for it, and he's willing to roleplay his character accordingly, this is the best way to handle Personality skills used against the heroes.

If the player isn't willing to roleplay a situation that could cloud his hero's judgment, you can allow the supporting character a normal skill check and apply the results from TABLE P25: ENCOUNTER SKILL EFFECTS (page 96 in the *Player's Handbook*). While the player retains control, the hero suffers penalties when he attempts actions that run counter to the charming character's interests. Apply the bonuses listed under "Attitude Modifiers" on Table P25 as penalties to such actions.

For actions or decisions that don't involve a skill check, ask the hero to attempt a Will feat check, including the modifier for how charmed he is. The result of the check determines how willing the hero is to act against the interest of the character who has charmed him. For example, the hero might know that he really ought to take the seductive spy into custody, but when she asks him to let her off the hook "just this once," allow the hero a Will feat check to see if he resists her.

thousands of dollars, while a handful of passersby in an empty part of town might provide a mere 2d20 dollars during an evening.

INTERACTION

The Interaction broad skill is the primary device used to measure the success of character communication. Whenever the hero tries to talk someone into doing something, this skill comes into play.

Remember to include the target's Will resistance modifier and any attitude modifiers from TABLE P25: ENCOUNTER SKILL EFFECTS (page 96 in the *Player's Handbook*). It's much easier to strike a bargain with a Charmed merchant than a Hostile one.

Bargain

The use of the *bargain* skill determines the outcome of a negotiation when both parties are inclined to cooperate. Unless you have specific information in mind, use the guidelines presented for the Business skill to determine the costs of buying and selling goods or services.

Charm

The *charm* skill is effective when used before employing another Interaction skill. *Charm* can alter a target's attitude, thus providing a bonus to later interactions. For example, warming up a Neutral merchant makes the ensuing *bargain* attempt much more likely to succeed.

Interview

This skill is a kinder, more sympathetic method of interrogation. It typically involves the use of flattery and charm rather than the threat of bodily harm. Add modifiers to the skill check to reflect the circumstances at hand.

Intimidate

Feel free to add modifiers to the *intimidate* skill check to reflect the circumstances at hand. A marine carrying a plasma cannon is more intimidating than a punk with a knife. However, that marine is not particularly scary when he's trying to lace down a tank. Successful use of *intimidate* usually has the side effect of driving the subject's attitude down one category—Friendly to Neutral, Neutral to Hostile, etc.



Entertainment skills in action

Seduce

Some situations are clearly inappropriate for romantic overtures; apply modifiers to a *seduce* skill check as you feel appropriate.

You should use your judgment regarding this skill. There's probably no need to narrate a seduction attempt in clinical detail. Roll the skill check, fade out, and move on to the next scene.

Taunt

Rather than force your players to bel-low obscenities and insult after insult, it's permissible to allow a *taunt* skill check and let the result determine the effect.

LEADERSHIP

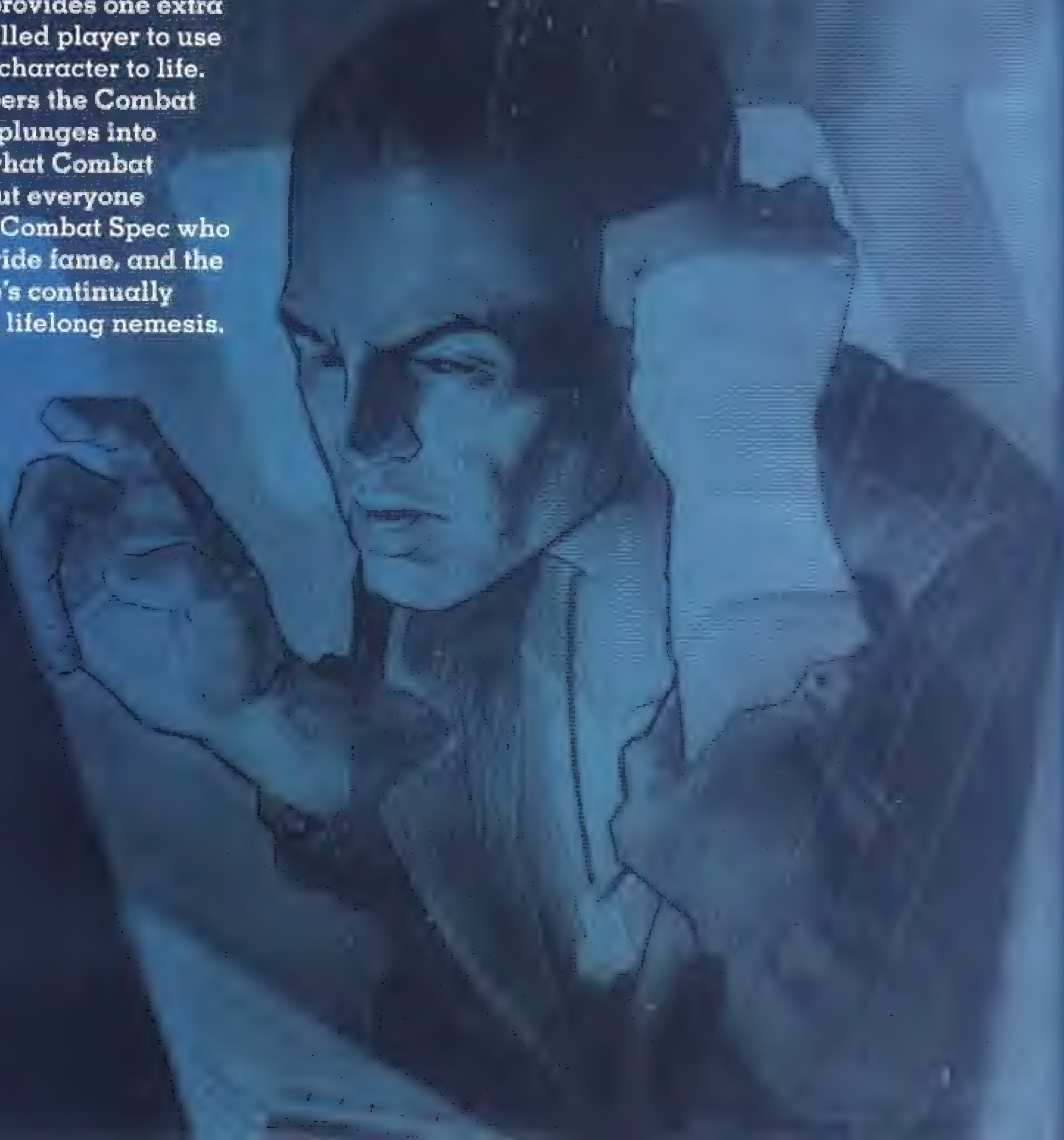
Use of this skill can confer bonuses that apply over the course of a complex skill check or a situation that is measured over hours, days, or weeks. For example, a successful Leadership skill check can provide a bonus during a forced march, a creative or scientific endeavor, or the organization of a voting drive.

In addition to conferring bonuses to individuals involved in carrying out a plan, Leadership takes the place of the Interaction broad skill when a hero is dealing with large numbers of people. When a hero whips a mob into a frenzy, rallies troops retreating in disorder, or commands an entire security detachment, Leadership is the appropriate skill.

CHAPTER 5

PERKS & FLAWS

Perks and flaws offer special benefits or bonus skill points for good character concepts. Each perk and flaw provides one extra handle for a skilled player to use in bringing his character to life. No one remembers the Combat Specialist who plunges into battle—that's what Combat Specs are for. But everyone remembers the Combat Spec who enjoys galaxywide fame, and the Free Agent who's continually bothered by his lifelong nemesis.



SELECTING PERKS & FLAWS

In the *Player's Handbook*, a limit of three perks and three flaws per character is established. Play balance may become difficult to maintain when characters purchase many perks in combination. In addition, a character with too many special benefits or disadvantages may dilute the concept that led to his creation. Finally, it could be a challenge to simply remember the numerous advantages and disadvantages.

Naturally, you have the final say in both how many perks and flaws are available to heroes, and which perks or flaws are acceptable in your game. If you're running a Stone Age campaign, it doesn't make sense that a player could choose Primitive as a flaw for his hero—everybody's primitive, so it's not a disadvantage. You might also want to disallow perks that provide game advantages that won't work in your campaign. For example, Alien Artifact may be inappropriate for a campaign set in the present day, or any campaign that doesn't leave planet Earth.

New Perks and Flaws

Dozens of good ideas for additional perks and flaws remain for you to add to your campaign. Keep a few rules in mind. In general, perks should not add more than a +2 bonus to one particular roll or type of roll; for example, an Eagle-Eyed hero might gain a +2 bonus to Awareness-perception checks. Be careful with

powerful perks—you might actually be wandering into character abilities better covered under the psionics, cybertech, or mutant rules. Take a look at your new perk as if you were putting together a character. If you would select it without hesitation because it seemed to be the most desirable perk available, it might be a little too good.

The same rules apply for flaws. Most flaws shouldn't give more than a +2 penalty to one type of check or skill on a permanent basis. Remember, if your players pick the flaw because it doesn't hurt them, you're giving them free skill points—and if they never choose the flaw, then you wasted your time designing it.

Keep in mind when designing both flaws and perks that the point of this benefit system isn't to make characters more powerful, but to make them unique and more interesting to play. A well-designed perk is one that adds distinctiveness to a character's concept.

Acquiring New Perks

A hero may decide to purchase a new perk as an achievement benefit when he reaches a high enough level. No matter how many points the character has available, the limitation of three perks still applies. If a hero begins play with three perks, it becomes impossible to acquire another later.

On rare occasions, you may assign a new perk to a hero to reward exceptional roleplaying or reflect developments in the game. A hero might acquire a Reputation or become a Celebrity through the growth

of the campaign and his own successes. See *Chapter 8: Achievements* for more information.

Getting Rid of Flaws

Buying off an old flaw is another available achievement benefit. When a flaw is eliminated in this manner, the hero retains any bonus skill points received during character generation.

You may also strike a flaw from a hero if you feel that it isn't being roleplayed properly. For example, if a Dirt Poor hero suddenly becomes wealthy in the company of all his Filthy Rich friends, and the player doesn't want to continue playing this flaw, you can just say that the hero lost his flaw. However, when you do this, you should withhold achievement points to make up for the fact that the hero just got a break. See *Chapter 8: Achievements* for details on withholding achievement points.

PERKS & FLAWS IN PLAY

While many of the listed perks and flaws are self-explanatory, you may need to exercise some judgment and initiative in order to make others work for you. The first step is to remember that perks and flaws are part of a hero. If you never have a player roll a flaw check for his hero's Temper, the flaw might as well not exist. One good technique is to note one situation per adventure in which a hero's perk or flaw might come up. For instance, you might decide that a

particular supporting character is likely to be impressed by a hero with Great Looks, or repelled by a hero with Poor Looks. Plan this ahead of time and keep it with your notes for the adventure.

Perk and Flaw Mechanics

Perks fall into two general types: active and conscious. Active perks don't require skill checks or feat checks; they provide a permanent modifier or benefit. For example, Ambidextrous and Heightened Ability provide benefits anytime the right situation applies.

Conscious perks only come into play when a hero makes a determined attempt to bring his perk to bear. Conscious perks generally require a perk check, which operates like a feat check (+d4 base situation die) using the hero's appropriate Ability Score. For example, since Concentration is a conscious Intelligence-based perk, a hero must make a check against his Intelligence score with a +d4 situation die in order to bring it into play.

You can assign modifiers to the use of a conscious perk, especially if the hero is trying it in an appropriate or inappropriate situation. For example, trying to use Celebrity on a backwater world might inflict a +3 or +4 penalty to the hero's perk check.

All flaws are considered active. Some flaws have no effect until triggered; for example, a hero with a Phobia suffers no effects until he is

confronted by whatever he is afraid of.

If you have a number of heroes in the game with flaws that must be triggered, jot down a reminder in order to keep track of which heroes' flaws are likely to turn up. It would be a shame if you forgot to take advantage of that hero's Phobia in a crucial spot of the adventure!

PERKS

If any perk doesn't fit your campaign or provides an ability that you don't want heroes to have, you may disallow it. Work with a player to devise a perk suitable for both his hero and your story.

Alien Artifact

An alien artifact can be either a perk or a flaw, depending on whether the benefits it provides are worth the headaches it entails. If one of your players chooses this perk, create a suitable artifact using the rules in *Chapter 12: Alien Artifacts*.

Another option is to ask the player what the artifact is and what it does, and then modify his suggestions to make the artifact match the power level, flavor, and background of your campaign. Of course, you can add powers or dangers the hero doesn't suspect.

Typically, the biggest threat posed by an alien artifact is the rarity and value of the device. Crime lords, treasure hunters, unscrupulous politicians, ambitious administrators,

spies, and agents who hear word of an alien artifact may take extreme measures to acquire it.

This perk is unique since it manifests in a single physical device. Because the player has invested skill points in this perk, you should exercise caution in stripping the artifact away. Unless a hero has demonstrated obvious lack of wit, allow him an opportunity to recover a lost artifact.

Ambidextrous

This perk is useful for fighting with a weapon in each hand. Obviously, weapons such as rifles and quarter-staves can't be used in one hand, even if the hero has this perk.

Animal Friend

It's likely that violent animals will naturally choose to attack individuals other than the character with this perk, given multiple targets.

Celebrity

While this perk is not a guarantee of limitless wealth and endless support, it can prove useful. Celebrities can gain access to closed doors, impress local officials, and generally get their way. One common use of this perk is to get things for free, such as dinners at fine restaurants, lodging for a few days, or passes to special events. Naturally, the celebrity should define why he's famous. Entertainers, sports stars, media personalities, war heroes, politicians, businessmen, and scientists are some common types of celebrities.

Concentration

At your discretion, the bonus for using the Concentration perk may last throughout a scene of continuous single skill checks or a complex skill check. For instance, a rock climber might gain the Concentration bonus throughout his ensuing climb, even if it lasts for hours. Of course, if he takes a break or gets distracted, he'll have to make another successful perk check or finish the climb without the bonus.

Danger Sense

You may allow a hero with Danger Sense to make an Awareness check you wouldn't normally allow another character. For example, if a hero is being stalked by an assassin using the Stealth skill, you might give him a last-minute Awareness-intuition check to detect the coming attack.

Achievement Bonuses

Complete rules for awarding achievement points appear in *Chapter 8: Achievements*, but the ability to roleplay perks and flaws deserves mention here. One of the biggest effects of any perk or flaw is the potential to gain extra achievement points through roleplaying. When you're ready to award achievement points for an adventure, carefully consider the question of whether the player roleplayed his hero's perks or flaws.

A good sign that a player is accurately trying to portray his character with flaws is a deliberate failure or disadvantageous story decision. For example, a player who holds his hero out of combat because he's roleplaying the hero's Obsessed or Spineless flaw might earn the achievement point for good roleplaying. A Clumsy hero who keeps on trying dexterous feats is another good example. A perk played as a disadvantage, such as a hero dropping what he's doing to look after his Powerful Ally's interests, is another sign that the player is trying to put himself in his hero's shoes and portray his character faithfully.

Bonus achievement points should never be an automatic advantage for the hero with a perk or flaw. Other perks and flaws, such as Heightened Ability and Old Injury, are impossible to roleplay and should almost never qualify for an achievement point bonus.

Faith

Keep an eye out to see if the player roleplays this perk accurately—this is your best guideline to determine if the hero is demonstrating Faith or not. A hero who displays skepticism, despair, or sarcasm probably isn't counting on his Faith to sustain him. Feel free to temporarily withdraw the perk's benefits until the hero's Faith returns. Just how the hero demonstrates such a return—prayer, a religious retreat, or penance—is up to you and the player to decide.

Filthy Rich

This can be a dangerous perk if you let it get out of hand; heroes with this perk should be watched carefully. It's best to consider the hero as having a limited cash fund available—an allocation of funds renewed every month, quarter, or year. Of course, the hero may have millions socked away in banks, sunk into investments, or balanced against debts of a similar magnitude.

Don't let a Filthy Rich hero buy whatever he wants whenever he wants. Vehicles and high-powered weapons and armor shouldn't be handed out easily. Even if the hero has thousands of dollars to blow, he still has to find someone with a spare starship to sell or an illegal plasma gun in the back of the store. Let Filthy Rich heroes live it up when their actions don't directly affect the story—renting the finest hotel rooms, eating in the best restaurants, or buying equipment that has an extra cosmetic appeal.

Fists of Iron

Normally, Fists of Iron is an active perk; it provides a 1-point increase to damage all the time with a successful perk check. The improved, more expensive version of the perk is actually a conscious perk, activated by a perk check against Strength.

Fortitude

The primary purpose of this perk is to give the hero an edge in resisting exhaustion and knockout.

Good Luck

You may allow the hero to use this perk for desperation rolls, when you have no idea what else might apply. Does the canister of poison break open or remain intact? Make a Good Luck check. Use of the perk is limited

to once per scene, but now and then it might be a way to cut a hero a break.

Great Looks

Great Looks impacts people of both sexes. It's not all about sex appeal—it's about charisma, presentation, confidence, and other intangible factors. Generally, the perk's benefits are lost in hostile situations or when dealing with members of other species.

Heightened Ability

This perk presents the opportunity for a player to trade some of a hero's skill points for one or more higher Ability Scores. The result is a character with better innate characteristics, but without as much variety in his skills.

Observant

The direct effect of the perk is to add a +1 bonus to Awareness-perception checks. At your discretion, this perk may apply its bonus to Investigate-search or track attempts, Deception-gamble skill checks, and other skills in which attention to detail might play a part.

Photo Memory

Obviously, if a player remembers the details of a situation, it is generally assumed that the hero recalls the information, too.

Powerful Ally

After selecting this perk for his hero, the player should work with you to determine exactly who the ally is, where the ally is located, and why the ally is willing to help the hero from time to time. Be sure to review the player's suggestions carefully and make sure that the Powerful Ally fits your campaign. It's reasonable for you to insist that the player pick out situations in which his ally just can't help out; for example, getting an old homeworld mentor to help out in a problem on the other side of the galaxy might involve a +3 or +4 penalty to the perk check. Moreover, the ally can't instantly appear in times of need. The hero has to have a way to call for help when he wants his ally to respond.

If the ally does come through for the hero, you have control over what kind of aid the ally provides. He or she might come to the rescue with guns blazing, or might use influence



Fear of falling

to send local forces to the hero's aid. Help might be in the form of money, information, legal assistance, or even a couple of thugs to act as muscle. Allies are people, too; a hero can wear out his welcome by abusing his perk or not showing a proper amount of appreciation and gratitude.

You can exploit the perk as an avenue for adventure. Someday the hero's ally may be in trouble, and it's likely that if the hero doesn't respond, the benefits of the perk will disappear.

Psionic Awareness

The range of this power is about 10 meters, so the hero must be the target of the psionic powers or be standing close to someone who is. Build tension by rolling dice secretly. If you really want to torment your players with paranoid delusions, throw the dice for no reason and ask a question such as "Dave, your hero is psionically aware, isn't he?"

Reflexes

This is a defensive perk that makes it more difficult to strike the hero in combat. In contests of pure reaction time, apply a -2 bonus to the hero's perk check.

Reputation

The power of Reputation is strong, but defies perfect definition. The subjectivity of this perk allows for the possibility that someone may or may not be impressed with the hero. For example, the hero's bonus to Will-based skills may not apply when she finds herself a long way from traditional stomping grounds. Ask the player what the hero did to earn a Reputation, and whom it's likely to impress. While this perk normally applies to Will-based skills that involve social situations (Administration, Investigate, and Street Smart, primarily), you could also allow the perk's bonus to apply to skills such as Business or Deception.

Tough as Nails

The hero is resistant to attacks that depend on Strength—Melee Weapons and Unarmed Attack. He's harder to hit and to hurt, shrugging off blows that might cripple others.

Vigor

The hero doesn't have to purchase an extra stun point in order to get an extra wound point. If the hero's dura-

bility rating is 8 stun, 9 wound, and 4 mortal, that's perfectly all right.

Willpower

This perk is useful for resisting mental attacks and Personality skills that operate against Will. In addition, if your campaign uses Mind-walkers, the perk assists heroes who are forced to resist mental attacks.

FLAWS

Keep an eye open for flaws that players don't regard as flaws. For example, players who select the Temper flaw may figure that even if their hero flies into a rage, he'll be the toughest guy around. Other heroes may try to use Infamy or a Code of Honor to their advantage in social situations. If you choose to allow the flaw, it's your job to make sure that the flaw occasionally impairs the hero in important situations.

Alien Artifact

Refer to *Chapter 12: Alien Artifacts* for details on designing alien artifacts and selecting powers. When an alien artifact is selected as a flaw, it's best not to choose a hand-carried item—if such an item is detrimental to the hero, it's harder to rationalize why he doesn't just throw it away. If your player is up to a roleplaying challenge, the hero may have a steadfast belief that the flawed artifact is the boon of his existence.

Bad Luck

While Bad Luck may not appear too detrimental at first glance, it is a devastating flaw. The hero with this flaw suffers a terrible mishap in 1 out of 10 heroic tests. You can use Bad Luck as an excuse for slowing the heroes down when they're sailing through an adventure too easily. It doesn't have to affect the unlucky hero alone—if he's driving and gets caught at a train crossing, everyone is slowed down by his misfortune. To be fair the flaw shouldn't be used in this fashion more than once per scene.

Clueless

A hero with this flaw requires a little special handling on your part. Unless the player is a flawless roleplayer, you want the player behind the Clueless hero to have no idea what his hero is clueless about. Have

the player mark three or four skills as his potential Clueless areas, then select one as his real weakness. Anytime the player needs to roll a skill check against any of those three or four skills, you roll the skill check for him in secret. Apply the Clueless modifier if the skill being used is actually the flawed one.

If the player is honest and a very good roleplayer, you can save some time by letting him know which skill he has trouble with. You have to trust the player to use the skill whenever his hero would give it a try, feigning ignorance of a character weakness.

Clumsy

This flaw affects all Dexterity feat checks and Dexterity-based skills. The list of affected skills includes heroic abilities such as the Modern Ranged Weapons broad skill. It's probably a bad idea to let this fellow drive.

Code of Honor

While many heroic characters have a code or ethos to follow, a hero with this flaw must find that his code occasionally limits his options. Encourage the player to do some of the legwork and draw up a list of five or six major points that the hero feels strongly about, and the way he expects to react in those situations. A typical heroic Code of Honor might involve avoiding the use of lethal force, defending innocents no matter what, always offering the villains a chance to surrender, and never turning one's back on people in need.

When the player has worked out his hero's Code of Honor, make sure that it presents some clear restrictions for the character. Now and then, you should set up situations in which the expedient, sensible course of action just doesn't square with the hero's code—an ethical system that's never challenged isn't a flaw. If a character fails to live up to his own code, reduce his achievement point reward for the adventure.

Delicate

In addition to successful Unarmed Attacks, other taxing activities might trigger this flaw, such as working in the salt mines or trying to dig someone out from under a pile of rubble.

Dirt Poor

A hero with this flaw is penalized in starting funds, but you should make

certain that this flaw doesn't disappear after one or two successful adventures. Even if the Dirt Poor hero finds the villain's cashbox and pockets thousands of dollars, he'll have a hard time holding on to it. Bill collectors show up at the door, a villain slaps a lawsuit on the hero, a message appears from home that a cousin needs an expensive operation . . . you get the idea. The *Player's Handbook* suggests that the hero might owe a lot of money to some faceless supporting character; this is an excellent way to keep the character Dirt Poor for a long time to come.

Once the character has eliminated the flaw by paying skill points, the debt collectors and financial drains will fade into the background.

Forgetful

Like Clumsy, this is a formidable flaw for a hero to carry around in a modern setting. If a player with a Forgetful hero ever asks to be reminded of the name of a supporting character, an access code, or a meeting place, smile at him and say, "I guess your hero forgot."

Fragile

This flaw doesn't make a hero more likely to be hurt, but can create big problems for someone with fatigue or mortal damage—the chance of his suffering additional damage is higher than if he didn't have the flaw.

Infamy

The player should define the event or situation that made his hero infamous, as well as an area or circle in which his Infamy is likely to manifest. For example, a player might decide that his hero is known as a notorious thief on a certain planet. Elsewhere, it's less likely that his Infamy will prove relevant—but on this planet he's got a tough time dealing with law enforcement. Moreover, it's possible that the hero was unjustly accused, framed, or is otherwise undeserving of Infamy. With efforts to redeem himself or prove himself innocent (and an expenditure of skill points), the flaw might fade.

In limited circumstances, you might allow the Infamy modifier to provide a bonus to interaction-intimidate checks, especially if the hero is notorious for ruthless or violent behavior. Don't allow a hero to get more benefits than penalties out of a character flaw.

Oblivious

Penalties may also apply to Investigate-search or track skill checks, if you think the hero's lack of perceptiveness might play a role.

Obsessed

Let the player define a particular behavior or situation that the hero can't resist, and then approve or modify his suggestions. Here are some ideas: An uncontrollable romantic might be distracted by every attractive character and villain; an obsessive gambler might be tempted to join any game of chance; a butterfly collector might be distracted by unusual specimens in the wild. If the trigger is rare, decrease the skill point bonus (a 6-point flaw becomes a 4-point flaw, for instance) to reflect the small chance of seeing it in play.

Old Injury

While this flaw is more common to characters whose concept resembles a grizzled veteran, any character could suffer the lasting effects of an injury from childhood or the recent past. The flaw might be triggered any time the hero falls; when he is caught in the radius of an area-effect weapon; when his attacker rolls the highest possible result on a damage roll; when he rolls a Critical Failure on an attack; or when he rolls a Critical Failure on his action check.

Phobia

The player must define what his hero is afraid of—and consider why the hero has this fear. You should make sure that the hero doesn't define this too strictly; it's better to have a phobia of all insects instead of carpenter ants or glowbugs. If a phobia seems like one that won't come up very often, you can reduce the skill point bonus for this flaw.

Poor Looks

Refer to the discussion of the Great Looks perk; this flaw can affect the hero even when he or she isn't dealing with the opposite sex.

Powerful Enemy

Powerful enemies seem to shadow heroes in every epic tale; this flaw provides you with material around which to build stories and adventures. When the character is created, ask the player to sketch out initial facts about the hero's nemesis, ex-

plaining who he is, why he hates the hero, and how he's likely to make the hero's life miserable.

Minor enemies are likely to show up more often than heavyweights, but they don't pose as much of a threat. Truly powerful enemies might remain behind the scenes, manipulating the hero's life. Don't involve the enemy in every adventure, but allow his presence to be felt at least once every two or three adventures, even if only to be a nuisance. Enemies don't have to go after the hero personally; they can send in bounty hunters or assassins, relay information about the hero's whereabouts to the authorities, take legal action against him and his property, or even go after the hero's friends and family.

Primitive

Encourage the player to reflect this flaw in the hero's skill selection. A primitive character with Vehicle Operation-space vehicle doesn't feel primitive at all. Modern technology can be defined as anything of a higher Progress Level than the hero's home society.

Slow

This flaw indicates an inability to react quickly in moments of stress, not a mental weakness. In actions that are contests of pure reaction time, this flaw may give a +2 penalty.

Spineless

You may apply a +1, +2, or +3 penalty to the character's Resolve-mental resolve skill checks when issues of character or courage come into play.

Temper

You may decide to eliminate the penalty if the player chooses actions that an enraged hero would naturally attempt. For example, a hero might not suffer the penalty in combat against the people who enraged him, but he wouldn't fight smart. He'd keep pounding on downed enemies instead of dealing with new ones, run through obstacles instead of around them, and refuse to retreat.

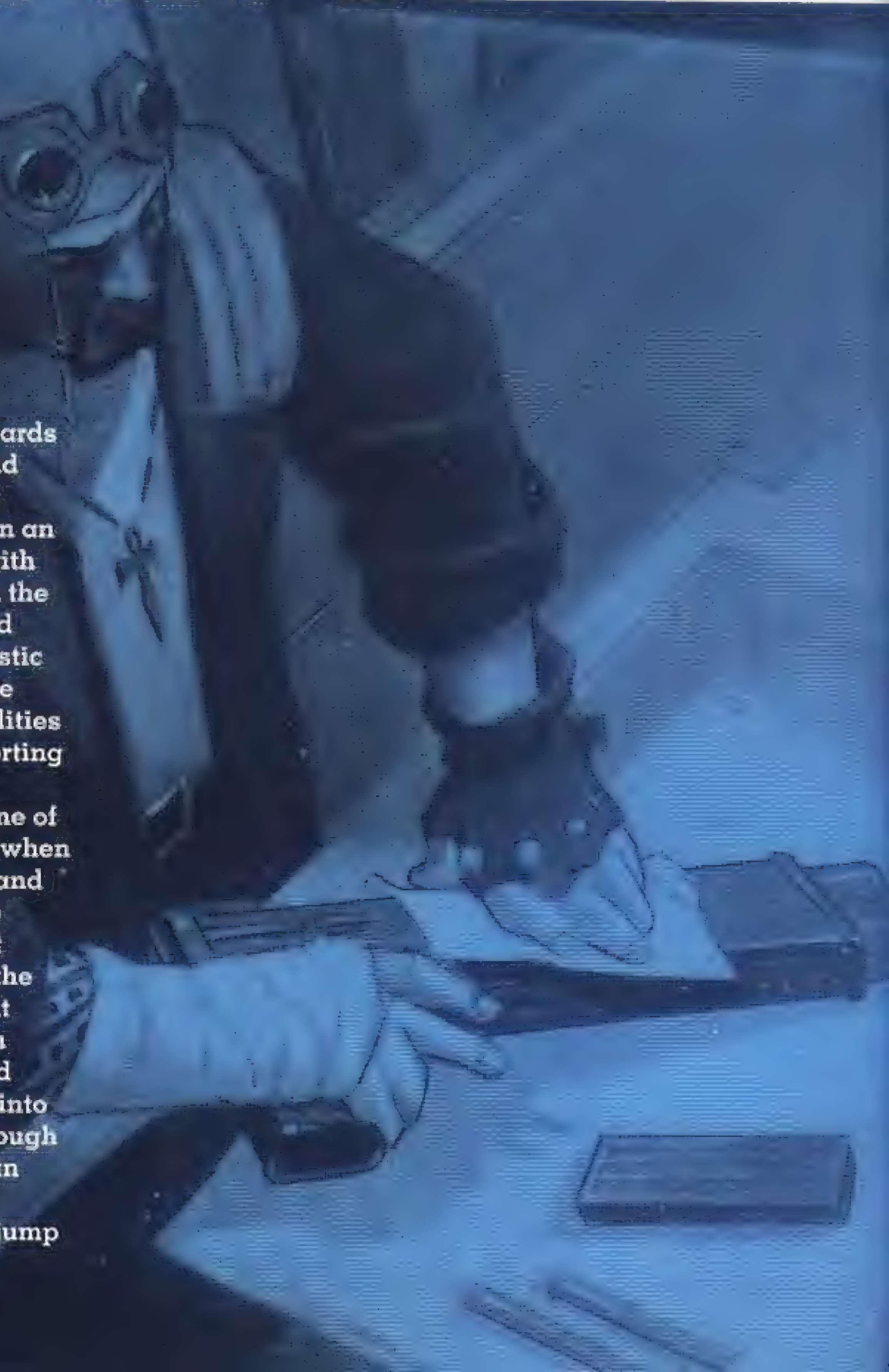
Bad-tempered heroes might also take out their frustration on nearby equipment or property, if there's nothing they can attack otherwise. Heaving an unresponsive computer out the window is every bit as appropriate as leaping to pound a smart-mouthed enemy into the ground.

CHAPTER 6

SUPPORTING CAST

One of the Gamemaster's rewards is the opportunity to create and portray intelligent supporting characters. Heroes don't live in an empty universe. Interacting with supporting characters is often the focus of entire adventures, and always part of the story. Realistic motivations, appropriate game stats, and believable personalities are all components of a supporting character.

You decide how and what one of these characters says or does when heroes associate with them—and what they're doing behind the scenes when the heroes aren't around. When the heroes foil the plan to kidnap the government minister, does the villain feign surrender? Does he retreat and gather his forces? Does he fly into an insane rage? Speaking through a supporting character, you can deceive the heroes, offer suggestions, issue threats, or jump in with a helping hand.



CREATING SUPPORTING CHARACTERS

The process of creating full-fledged imaginary people may seem daunting. Every human being and alien has his, her, or its own background, family history, job, friends, morality, ideas, dreams, and aspirations. Few of the characters you may create will require this level of development. At the basic level, you don't need more than a brief description and a reason for his being in the scene to bring in a supporting character.

Many Gamemasters prefer to incorporate personality, history, and attitude into each major supporting character. Everyone has seen the crime boss's legbreaker as a minor villain in a story, but what if the bruiser is a retired professional wrestler, down on his luck? He might not be happy with his new line of work. Finding ways to maintain a stable of interesting and believable supporting characters is a challenge and a delight to an experienced Gamemaster.

All supporting characters need a thumbnail sketch or description, so that the players can visualize what kind of person their heroes are dealing with. First impressions count.

Once you've chosen a couple of descriptive phrases to paint a quick picture of the supporting character, consider how the character will sound, look, and act. What interests and motivates him, and what does he like to talk about?

The combination of two contrasting characteristics makes for an interesting thumbnail personality. An argumentative but naive character could be a stubborn, misinformed cretin who just won't admit that he's wrong. An impulsive and hot-tempered character might be in the habit of acting before he thinks, quick to laugh and quick to anger.

Nonprofessionals

Most supporting characters are nonprofessionals. They don't pursue one of the four heroic professions: Combat Spec, Free Agent, Diplomat, or Tech Op. Of course, they still have jobs (doctor, accountant, school-

teacher, etc.). Everyday folks and even the average thugs and gangsters aren't quite as capable as beginning heroes. These characters, however, may have a substantial number of skills from the profession lists and perform jobs that you might find professionals doing. In other words, not every person in a military uniform is a Combat Spec—many low-ranking soldiers and junior officers don't have any profession at all.

Of the characters who populate a typical campaign setting, 60 to 80 percent are nonprofessionals. If the majority of characters in a setting were heroic in nature, it would be difficult to keep the players' heroes at the center of the action.

The Nonprofessional

Many members of the supporting cast are normal people without a heroic profession. Some may not have the Ability Scores to qualify, and others may simply have never had the desire or opportunity. Despite this shortcoming, a nonprofessional can still function as an interesting supporting character, a faithful ally, or a dangerous villain.

Nonprofessional characters have Ability Scores, just like heroes. You can generate these scores using any method you want, or simply assign numbers that you think are appropriate.

Supporting cast members receive an allotment of points to purchase broad and specialty skills, just like heroes—a nonprofessional with a high Intelligence score can easily have more skills than a hero with a low Intelligence score. Since a nonprofessional character lacks a profession, he pays for all skills at the list price.

Gamemasters generate all skills and secondary statistics for nonprofessional characters normally. These supporting cast members receive the same number of stun, wound, fatigue, and mortal points as a hero with the same Constitution score, and they determine their action check score and actions per round normally. A nonprofessional's base situation die for action checks is +d0. He receives no action check bonus because he doesn't belong to one of the heroic professions.

TYPES OF SUPPORTING CHARACTERS

Each supporting character falls into one of five general categories: *villains*; *allies and sidekicks*; *employees and followers*; *experts*; and *extras*. Most scenarios you create will feature at least one villain and a number of extras. The appearance of other supporting characters depends on the heroes' choices and the decisions you've made about the setting.

Villains

A well-crafted villain is indispensable in any campaign. Villains are the people who don't want the heroes to succeed and are willing to act on their desires. In a classic roleplaying scenario, it is the villain's actions, such as attacking a populated settlement or killing someone the heroes know, that provoke the heroes into action. Or, if an adventure opens with the heroes doing something that wasn't caused by a villain's action, the villain might be reactive instead of proactive, acting as an obstacle to the heroes' plans.

Just like the villains in good novels or movies, villains in your campaign need to have a decent

motivation, a distinctive *modus operandi*, and a plan. If you've decided that the local crime lord doesn't want the heroes to find the alien artifact hidden in the ruins, ask yourself why she cares, what she's likely to do about it, and how she's going to make her plan work. Does she want the ruins left abandoned to conceal evidence of a crime? Maybe she wants the artifact for herself, and she's willing to let the heroes do the hard work of finding the relic so she can have her subordinates ambush them when they get back to town. Maybe she's more subtle than that and plants a turncoat in the heroes' group. Or, she might use her influence in the community to have the heroes arrested, and their find confiscated.

Don't waste time developing villains that the heroes will never meet. If you've decided that the big boss is out of reach, concentrate on building character profiles for the major lieutenants and subordinates who will interact with the heroes. Think about ways you can keep a "good" villain around from adventure to adventure: if the heroes have a dedicated foe that they can't get their hands on, you can create plots in which the old villains try new tricks, are forced into temporary alliances with their hated foes, or pursue special vendettas against the heroes.

A villain's power depends on his role in the campaign. An epic villain—one who could be around from story to story—should be stronger than the entire group of heroes; in order to bring him down, they will have to make unusual preparations, possibly embarking on a series of adventures just to get ready to face the true menace. *Major* villains might be defeated at the end of an adventure, but each one is about as tough as the party, and it will take a concerted and intelligent effort to defeat them. *Minor* villains can be disposed of in a single scene, and aren't much tougher than a single hero. Characters of lesser importance than a minor villain, such as the deputies and security guards around a more important character, are *extras*.

◆ **Example:** A group of heroes averaging achievement level 5 wanders from planet to planet as traders and troubleshooters on their drive freighter. A minor villain could be a character of level 3 to 6, perhaps a match for one hero alone. Major vil-

Villains and Last Resort Points

Just as heroes can avoid certain death by using a last resort point, some supporting characters may also have this special ability. For villains, last resort points are based on their role in the story:

Villain's Role	Last Resort Points
Extra	0
Minor	d4-2
Major	d4
Epic	d4+2

Villains begin with a fresh store of last resort points at the start of each new adventure.

Villains usually save their last resort points to use for degrading mortal damage to wound damage, or to negate damage that might render them unconscious. For example, if a hero attacks a villain and gets an *Amazing* success, the villain will probably reduce this to a *Good* success in order to avoid lethal injury. Similarly, a villain with only 1 stun point left might use his last resort point to turn a hero's *Ordinary* hit into a *Failure*.

A Cruel World

The *ALTERNITY* game makes a simple assumption about the nature of the universe: **Heroes are a cut above. They're creatures of fame and fortune about whom fate weaves exciting if difficult lives.**

Of course, it's possible to advance another proposition: **Heroes are simply men and women no different from most of the supporting cast. They may be thrown into situations that make heroes out of ordinary folk. To reflect such a choice of philosophy in the *ALTERNITY* system, reduce the number of points that characters—heroes and villains—can assign to **Ability Scores**. Using a maximum of 54 points drops the average Ability Score to 9, creating a more harshly realistic game environment.**

lains should be level 5 to 8, with special advantages or resources to make them a match for the entire party. An epic villain for this group could be level 10 to 15, with numerous underlings, exceptional resources, and a clear advantage over the heroes on even their best day.

A villain doesn't have to be physically superior to the heroes. Indeed, an epic villain may not demonstrate any ability for combat and might never confront the heroes physically—at least not personally. Villains run in packs, surrounded by minions who fight for them. Some villains may wield positional power, using the authority of their office or their connections. A corrupt planetary governor might be no match for the heroes in a gunfight, but the players are dreaming if they think the unscrupulous governor is going to shoot it out with them! Having a number of supporters to call upon or enjoying some unusual positional authority can elevate what might be

a minor villain in most circumstances to a major or epic villain.

Allies and Sidekicks

The heroes aren't the only ones fighting on the side of truth and justice. Other characters may pass through, helping them against a common foe. Allies and sidekicks are characters who join the hero party. *Allies* are Gamemaster-controlled characters who serve as guides, advisers, or extra muscle for the heroes for a specific adventure. *Sidekicks* are player-controlled henchmen who stick with a hero out of loyalty and friendship. An ally who isn't tied down to one spot might eventually become a sidekick—if one of the heroes treats him with respect and demonstrates an honest friendship and concern for that character.

Allies are useful tools for the Gamemaster. They can provide skills and firepower that the heroes lack in crucial situations. They can act as sources of information and plot devices. Allies make a story more immediate to the players—if a character known to the heroes is the victim of a crime lord, the players find themselves more involved in the story than if they'd only heard rumors of the villains.

Allies can only be acquired through roleplaying over time, and they aren't perfect; allies can deceive, be deceived, betray, and make mistakes. Villains trying to win the heroes' confidence may join the party as allies.

Sidekicks represent a special resource for the heroes. Unlike most supporting characters, a sidekick is controlled by a player, not by the Gamemaster. Acting as a second

Allies, Sidekicks, & Last Resort Points

Allies, sidekicks, and other members of the supporting cast may have last resort points. The number of points they receive is equal to the number a hero of the same profession and Personality score would receive. Allies and sidekicks generally use their last resort points to avoid mortal injuries.



Always obey your weren sidekick

TABLE G23: EMPLOYEES

Employee	Avail	Ability	Skill	Salary
Assistant	-2	WIL	Administration	1500
Cook	-1	WIL	Knowledge-cooking	1500
Driver	-1	DEX	Vehicle Operation	2000
Engineer	+2	INT	Technical Science	3000
Escort	+1	PER	Interaction	4000
Guide	0	WIL	Survival	2500
Interpreter	+2	INT	Culture	2000
Laborer	-3	STR	Athletics	1000
Medic	+2	INT	Medical Science	3500
Pilot	+2	DEX	Vehicle Operation	5000
Ruffian	-1	STR	Unarmed Attack	1000
Security pro	+2	INT	Security	3500
Soldier	0	DEX	Ranged Weapons	varies
Spacehand	0	STR	System Operation	3000
Steward	+1	PER	Administration	2500
Technician	+2	INT	Any Science	4000
Thug	0	STR	Melee Weapons	2000

character, a sidekick augments the party's skill pool and fighting power.

The player maintains a record sheet for his hero's sidekick and controls his actions during play, but as the Gamemaster you can overrule any action that you think is unreasonable or out of character for the sidekick. Or there may be times when you decide to take control of a sidekick in the interest of the story.

Thoughts of selflessness and heroism aside, it's a rare sidekick who will willingly sacrifice his life for a hero.

A hero can't just go out and buy a sidekick—the player has to demonstrate through good roleplaying and successful adventuring that his hero has won the friendship, respect, and loyalty of the character in question.

Allies who join the heroes on a temporary basis might exceed the highest character level in the party by several levels, although allies who are equal or slightly inferior to the average hero are more common. Sidekicks never attach themselves to a hero of lower level. If a sidekick ever becomes more powerful or important than the hero he follows—or believes that he has become so—he strikes out on his own.

Sidekicks also make excellent character choices for players new to your campaign; the new player can leap in without a wait. The other heroes will already know something about the new hero, and they'll have

an established reason to work together.

Employees and Followers

From time to time, heroes need hired help. Part of your job is to roleplay employees and followers and maintain their record sheets. *Employees* are characters personally hired by a hero and paid out of the hero's pocket. *Followers* obey a hero's orders because of the hero's authority,

accomplishments, or magnetic personality. A character with military, civil, or corporate authority might be assigned followers to help him do a job. For example, the captain of a starship may have many followers among the officers and crew of his ship.

Employees and followers are less competent than the hero himself, inclined to view the hero as their boss, superior, or leader. If it's part of their job description, employees will accompany a hero on an adventure.

Employees and followers range the spectrum of competence, rebellion, and zeal. Imagine a hero who is an up-and-coming corporate trouble-shooter. The company assigns a field team from the research division and puts the hero in charge. The leader of the field team might resent the hero, since he doesn't understand why an executive is calling the shots

instead of skilled scientists. One member of the team is bent on climbing the corporate ladder. Another is a maverick who doesn't like doing what anyone tells him to do, let alone an exec he's just met. Imagine the headaches you can give to the players if their heroes must manage such subordinates.

While employees and followers are usually less competent than heroes, they may match or exceed the heroes' skill in their areas of expertise. A party might hire a local guide whose Movement, Survival, and Awareness skills are far superior to those of the heroes. Although their guide might prove worthless in a fight, the heroes will need his skills to get them through the adventure.

Here are a few guidelines to keep in mind when heroes deal with employees and followers:

- ▶ Employees grumble when the job gets dirty, long, or dangerous.
- ▶ Noncombative subordinates react like normal people to danger—they hug the ground in a gunfight, run away from hideous aliens, or freeze like a deer in headlights at the first sign of danger.
- ▶ Employees and followers expect to be treated decently and paid on time. Heroes who abuse these characters or fail to meet their obligations may provoke resignations, legal actions, or desertions.

► Most employees and followers are hesitant to break laws, cross powerful people, or otherwise get themselves into serious trouble on their employer's behalf.

Heroes who are hiring employees or acquiring followers must take the time and trouble to look in the right place. A high-ranking military officer can't requisition or reassign personnel unless he's on a base or aboard a ship, and even then the base commander or ship captain may refuse his request.

Administration, Street Smart, Culture, Interaction, or Leadership skill checks may be called for in order to locate potential employees or followers and arrive at an understanding with them. In order to attempt one of these skill checks, the heroes should be taking steps to locate prospective employees. If heroes want to hire skilled and reliable men and women to fill out a ship's crew, they'll have to look in the places that spacehands frequent, post notices or run advertisements, and possibly conduct interviews. If the players don't want to play out the process of hiring a follower, you have free license to throw incompetents, malingerers, criminals, and other rotten apples into their expedition.

The employer-employee relationship is a business deal. The employee provides a service in exchange for a sum of money. People with rare and valuable skills are hard to find, and expensive to hire. TABLE G23: EMPLOYEES lists some of the employees heroes are most likely to hire.

The availability column gives a bonus or penalty to the hero's skill check for finding and hiring a particular type of employee; the salary column gives the basic monthly wage that the employee expects.

A typical employee or follower possesses a score of 8 to 11 (d4+7) in his key Ability, and d4 skill ranks in the specialty skills of his occupation. Employees with higher Ability Scores or skill ranks can command higher salaries than the numbers given on the table above.

Assistant: A secretary, receptionist, or clerk. Unusual assistants such as a paralegal or travel or expense secretary may be more expensive.

Cook: A basic ship's cook. A personal chef could cost \$5,000 a month or more.

Driver: A knowledgeable local behind the wheel of a land vehicle. A chauffeur is much more costly.

Engineer: A competent mechanic or repairman, possibly the foreman for a gang of laborers. A chief engineer might be paid an extra \$1,000 per month.

Escort: A good-looking, witty, and charming companion for formal events. An escort may double as a cultural guide or a host for special events, or even a bodyguard, for an additional cost.

Guide: A local who knows the area where the heroes want to travel. An exceptionally dangerous or remote destination may drive up the price.

Interpreter: Someone who speaks the local or native language and a more common or universal tongue. An interpreter with negotiating or diplomatic skills costs an extra \$2,000 to \$5,000 per month.

Laborer: Unskilled labor for whatever needs done. If the work is at all technical in nature, the heroes must supervise or arrange for an engineer or technician to work side by side with the laborers.

Medic: A paramedic, nurse, or similar person with medical training. Many small communities and outposts, including small starships and driveships, can't support a medical specialist, and so many medics have a second occupation. Among small tradesmen, the ship's medic often doubles as the communications or science officer.

Pilot: A spacefaring pilot usually hires on for a set number of transits, manning whatever spacecraft the employer provides. On the other hand, a planetary pilot often owns his aircraft; the price given includes the cost of chartering the aircraft.

Ruffian: Low-class, untrained muscle with few combat skills. A ruffian usually works one job at a time.

Security pro: A top-notch security specialist. Such an employee can be obtained through a private consultant, a detective agency, or similar means.

Soldier: Most soldiers, marines, or other military personnel are paid by their respective governments. Professional mercenaries are usually very rare. In lawless areas, heroes and villains might find soldiers interested in supplementing their normal pay. Since bribery and corruption are involved, the cost is variable.

Spacehand: A trained laborer, miner, cargo handler, bridge or engineering mate, or general maintenance person. Spacehands have a general familiarity with their vessels, and usually have dedicated skills to command crew stations. Many spacehands also possess the Acrobatics-zero-g training skill.

Steward: A personal valet or butler. A luxury in most settings, a steward fills multiple roles as he serves and watches over his charges.

Technician: A person with training in a highly technical field, such as Computer Science, Technical Science, or System Operation.

Thug: Low-class muscle with modest combat skills. Likely to be overconfident and hard to work with, but more effective than a ruffian. Like ruffians, thugs prefer to work in groups.

Experts

While experts are employees of a sort, they're unlikely to accompany a hero on adventures. Experts provide skills, resources, and information that the heroes couldn't get by themselves. A hero who needs to break into a Grid system might hire an expert hacker to do it for him, while a hero who requires medical attention could seek out surgeons or medical technicians.

Unlike employees, experts are one-shot resources. A hero pays a fee to obtain a service, and when the contract is up, the expert doesn't work for him anymore. Of course, it never hurts to keep a trustworthy lawyer, accountant, or investment counselor on retainer. It's a good idea for a hero to have someone to watch over his fortune if he travels a lot.

Experts also differ from employees in their level of expertise. They possess skill scores that are higher than the heroes' own scores in specific areas. Assume that an expert has a score of 10 to 13 (d4+9) in his key Ability, and d6+2 ranks in his key skills.

A list of some common experts appears on TABLE G24: EXPERTS. The cost column gives the fee the expert charges for a particular task or a particular length of time. An expert with high ranks in his key skills may charge more.

Academic: A hero can hire an academic to perform research, analyze

TABLE G24: EXPERTS

Expert	Avail	Ability	Skill	Cost
Academic	+1	INT	Knowledge	200+/day
Attorney	-1	INT	Law	300+/hr
Bounty hunter	+2	DEX	Investigate	200+/day
Burglar	+3	INT	Stealth	varies
Consultant	+1	PER	varies	1000+/day
Doctor	-2	INT	Medical Science	250+
Hacker	0	INT	Computer Science	250+/day
Investigator	+2	INT	Investigate	250+/day
Scientist	0	INT	Any Science	varies
Surgeon	-1	INT	Medical-surgery	5000+

data, and examine theories. Depending on the scope of the project, the academic may take from 1 to 12 weeks to deliver a result. Some academics may work for free, especially if the project promises to revolutionize their field or guarantees a chance to be published.

Attorney: These experts charge by the hour; a criminal defense attorney runs up as many as 100 billing hours over the course of up to 6 months. Major civil suits can take up to 1,000 hours over the course of 12 months. These are just ballpark figures—tough cases can take years to settle.

If a hero is suing someone, an attorney may work for a percentage of the total award.

Bounty hunter: If the heroes don't have the time or resources to find someone, they can hire a bounty hunter. The amount of talent and professionalism among bounty hunters can vary widely.

Use the following system when a hero isn't directly involved with a bounty hunter's work. Finding someone in the immediate region or state, or in the same star system, takes 2 to 40 days (2d20). Finding someone outside the region or star system requires 10 to 120 days (10d12) to localize the quarry, plus another 2 to 40 days to locate him in the new region or star system.

Bounty hunters charge three times their normal fee for traces that require long or interstellar travel, and twice as much again if they're hired to bring the quarry back instead of just locating him. Dangerous traces may multiply the price again. Expenses are the responsibility of the employer.

If a hero performs the job of a

bounty hunter—or is the target of one—the hunter must make Investigate-track checks to pick up the target's trail. Allow one check per day in the local region or star system, or one check per 10 days out of the region or star system. The hunter's progress in catching up to his target depends on the result of the Investigate-track skill check: Critical Failure, lose three days; Failure, no gain; Ordinary, gain one day; Good, gain two days; Amazing, gain three days.

◆ **Example:** Zathos has been hired to locate the sometimes elusive Jack Everstar. He starts 10 days behind, in the last system Everstar was spotted. Zathos makes a skill check and gets an Amazing result. Now he's only 7 days behind; wherever Everstar was a week ago, Zathos is there asking questions. If this brings Zathos into the same system as Everstar, he'll be able to start making checks once every day.

Burglar: Hiring a break-in expert is a common tactic to acquire something when legal means aren't available or expedient. Few burglars advertise their calling, so it takes some work to find a person who's willing to take on the job. Exceptionally dangerous, difficult, or prolonged assignments may raise the price.

Consultant: This category includes any expert who might offer advice or manage affairs for a hero. Or, you can allow a consultant to add a bonus to a hero's skill check when dealing with a problem in the consultant's field. For example, a hero trying to push a repair order through a shipyard bureaucracy could hire a consultant familiar with the shipyard. The result of the con-

sultant's skill check provides a modifier to the hero's attempt to use another skill to get the job done.

Doctor: The doctor can use the Medical Science-treatment skill to attempt treatment of diseases or restoration of wound points. A simple checkup costs \$250, but diagnosing a strange condition could cost \$500 to \$2,000, and the treatment could run \$100 to \$4,000 per week for 12 weeks.

Treating simple injuries doesn't take long. One or two hours is sufficient for the doctor to treat a hero's injuries. A successful Medical Science skill check allows the doctor to restore 2 wound points if using a first aid kit, or 4 wound points with a trauma pack or more sophisticated equipment. If this isn't sufficient to heal the hero, he might still be down a couple of wound points until he's had a chance to heal with time, or he could see a professional surgeon. In civilized areas, a doctor has access to medical equipment available at his Progress Level.

Hacker: The primary function of a hacker is to infiltrate computer systems and retrieve data. Or, a hacker can upload something into the system—a devastating virus, a command to shut down security systems, or any sort of false data. The more illegal and dangerous a job is, the more money the hacker will want. Preparing a hacking job takes at least 2 to 24 hours (2d12). The job itself rarely requires more than a few minutes if the hacker is one of the elite.

Investigator: Although heroes should do their own investigating when they want to find out how something happened, from time to



Closing wounds and opening doors: Experts at work

time they may need to hire an expert to help them out. Usually a private eye or security specialist, investigators need anywhere from 3 to 60 days (3d20), depending on how much evidence there is to sift through, the types of tests necessary, the condition of the site, and the number and usefulness of witnesses.

Scientist: Most scientists are associated with a university or corporation. In order to secure the services of one, a hero must either contract with the corporate office (\$3,000 a week is fair) or offer an honorarium to a university. A scientist can examine an artifact or phenomenon in exacting detail. Depending on the nature of the request and the information or materials available, the examination could take anywhere from a week to a year or more.

Surgeon: A hero who has suffered mortal damage needs a surgeon. Repairing such severe injuries requires a number of hours depending on the surgeon's Medical Science-surgery complex skill check (see page 85 of the *Player's Handbook*). The cost of the facilities and extra personnel is included in the cost figure on TABLE G24: EXPERTS.

The hero faces a hospital stay of d4 weeks to recover from the surgery, regain use of any damaged limbs, and acclimatize himself to any transplanted or artificial tissues. Each week in the hospital costs an additional \$3,500.

Extras

A passerby who points out which way the villains went, a shopkeeper who sells something to the heroes, and the common guards and thugs are extras. Unlike other types of supporting characters, you should make up extras on the fly, when they're needed.

Extras don't need much in the way of game statistics, personality, or motivation. They're normal people, doing whatever it is they do from day to day. Extras lend depth and realism to a scene. Instead of telling the players, "You find out that the villains caught the B train," consider the appearance of an irate subway passenger as an extra. You might relate the same information in a different form: "A stout matron shoves her way to the front of the crowd on the subway platform. She has a tiny lap

dog clamped under one arm, and she's red in the face. 'Are you cops? Some punks with guns just boarded the B train!'"

Using an extra to relay information like this takes a little more time, but it helps to fill the cities and streets of your campaign world. If the heroes have questions to ask, there's a universe full of supporting characters who can interact with them. Imagine the heroes quizzing the dog-toting lady about details of the villains' armament, condition, or destination. You'll have more fun and you'll draw the players deeper into the story than if you simply announce the information.

Because an extra has only one job to do in any given adventure, each requires only a minimal amount of preparation. You don't need game statistics for the matron described above. The heroes probably aren't going to shoot at her, charm her, or try to strike a business deal. Extras who might turn out to be villains need a bit more: a Constitution score (for durability rating), an action check score, a combat-related skill, a weapon, and maybe some armor.

SUPPORTING CHARACTER TEMPLATES

Several templates for typical supporting characters of different power and experience level are presented here. Each template includes the vital statistics for typical representatives of certain careers of Marginal, Ordinary, Good, and Amazing quality, including Ability Scores, action check scores, number of actions per round, key skills, and signature equipment.

► **Marginal characters**—average members of society—are nonprofessionals. The average Ability Score of a marginal template is 9, and the list of skills is small.

Employ marginal characters as extras. They don't have the resources or talents of even a beginning hero, and shouldn't assume roles of importance in your game.

► **Ordinary characters** have capabilities roughly equivalent to those of a beginning hero (level 1). They have a profession, a good selection of important skills, and an average of 10 points in each Ability Score.

Ordinary characters are above the norm. Minor members of your supporting cast, both villains and allies, can be characters of this quality.

► **Good characters** wield power and versatility equivalent to level 6 heroes. The skill selection is both diverse and advanced, and the average Ability Score is 11 points.

These characters can be major members of the supporting cast. Powerful villains and esteemed allies are characters of this quality.

► **Amazing characters** are figures to be respected or feared. These characters have stunning power at their fingertips unless you're running a superheroic campaign (see *Chapter 13: Campaign Design*). They're equivalent in power to level 12 heroes, and have an average of 12 points in each Ability Score.

Amazing characters should be used only in extraordinary circumstances, such as for ultimate villains or dominant members of the supporting cast.

More powerful characters possess all the skills listed for inferior characters. For example, a Good character has Marginal, Ordinary, and Good skills.

These templates provide general guidelines. Feel free to modify them for your campaign's needs by changing Ability Scores or adding skills. For example, it's reasonable to allow a veteran and experienced character to have skills from a Good template, even if the character's Ability Scores aren't exceptional.

The individual characteristics of a member of the supporting cast should vary from figure to figure. Use the templates here when you need a character's statistics quickly, or use them as a frame to construct your own supporting characters.

Administrator

This Diplomat is a government bureaucrat or corporate employee—such as a city hall official, department head, or station administrator.

	M	O	G	A
STR	8	9	10	11
DEX	9	10	11	11
CON	8	9	10	11
INT	9	10	11	12
WIL	10	11	12	13
PER	10	11	12	14
Action check	9/4/2	11/5/2	12/6/3	12/6/3
#Actions	2	2	2	3

Marginal Skills: Business; Knowledge—sociology; Administration—bureaucracy, management; Resolve; Culture; Interaction—bargain, interview.

Ordinary Skills: Business—corporate 2; Administration—bureaucracy 2; Culture—etiquette (specific); Deception—bluff, bribe, gamble; Interaction—bargain 2; Leadership.

Good Skills: Law; Investigate; Culture—etiquette (specific) 3, etiquette (specific); Administration—bureaucracy 4, management 3; Resolve—mental 2; Leadership—command 2.

Amazing Skills: Business—corporate 4; Knowledge—computer, deduce 2; Administration—bureaucracy 6, management 6; Interaction—bargain 4, interview 3; Leadership—command 4, inspire 2.

Equipment: Comm gear, data slate.

Bartender

The local Diplomat who tends bar, the bartender is a good source of information, local news, and commiseration.

	M	O	G	A
STR	9	10	11	12
DEX	8	9	10	11
CON	9	10	11	11
INT	8	9	10	11
WIL	10	11	12	13
PER	10	11	12	14
Action check	8/4/2	10/5/2	11/5/2	12/6/3
#Actions	2	2	2	3

Marginal Skills: Unarmed Attack; Vehicle Operation; Business; Street Smart; Interaction—bargain, charm.

Ordinary Skills: Melee Weapons—bludgeon; Business—illicit, small; Knowledge; Street—knowledge, criminal; Deception; Entertainment.

Good Skills: Melee—bludgeon 2; Business—illicit 2; Street—knowledge 2, criminal 2; Deception—bluff, gamble; Culture; Interaction—bargain 3, charm 3, interview, intimidate, seduce, taunt.

Amazing Skills: Unarmed—brawl 2; Medical—psychology; Street—knowledge 6; Deception—bluff 3, bribe, gamble 3; Interaction—bargain 4, charm 4, interview 2, intimidate 2, seduce 3, taunt 3.

Equipment: Club or stun baton.

Brawler

Toughs and gang members stand as ready, low-grade Combat Specs for the average villain to employ.

	M	O	G	A
STR	10	11	12	14
DEX	9	10	11	12
CON	10	11	12	13
INT	8	9	10	11
WIL	9	10	11	11
PER	8	9	10	11
Action check	8/4/2	12/6/3	13/6/3	14/7/3
#Actions	2	2	2	3

Marginal Skills: Athletics; Unarmed-brawl; Melee Weapons; Modern Ranged Weapons; Vehicle Operation; Stamina; Street Smart; Interaction.

Ordinary Skills: Unarmed-brawl 2; Melee-blade; Modern-pistol 2; Stamina-endurance; Street-criminal, knowledge; Interaction-intimidate.

Good Skills: Unarmed-brawl 4; Melee-blade 3, bludgeon 2; Stamina-endurance 2, resist pain; Knowledge-first aid; Resolve-physical; Leadership.

Amazing Skills: Melee-powered 2; Modern-pistol 4, SMG; Stealth-hide, sneak; Business-illicit; Tactics; Street-criminal 3, knowledge 3; Deception-bluff, bribe, gamble; Leadership-command 2.

Equipment: Cellular phone, concealed holster, short CF coat, 11mm charge pistol or autoflechette SMG.

Corporate Executive

If there's money to be made, a corporation is going to get involved. The corp exec is a tough-nosed Diplomat who sees to it that matters get settled in the Company's favor.

	M	O	G	A
STR	8	9	10	11
DEX	9	10	11	12
CON	9	10	11	11
INT	10	11	12	13
WIL	10	11	12	14
PER	8	9	10	11
Action check	9/4/2	11/5/2	12/6/3	13/6/3
#Actions	2	2	2	3

Marginal Skills: Business-corporate; Knowledge-computer; Administration-management; Deception; Interaction-bargain, interview.

Ordinary Skills: Modern Ranged Weapons; Business-corporate 3, illicit; Deception-bluff, bribe 2; Interaction-bargain 2, charm, interview 2, intimidate.

Good Skills: Modern-pistol; Vehicle Operation; Business-corporate 4, illicit 2; Investigate; Resolve; Culture-etiquette (specific); Interaction-bargain 4, charm 2; Leadership.

Amazing Skills: Business-corporate 8, illicit 4; Resolve-mental; Interaction-bluff 4, bribe 4; interview 4, intimidate 3.

Equipment: Suit, comm gear, hand-held computer, deflection inducer, stutter pistol, smart holster.

Doctor

Medical technicians, surgeons, and experimental biologists are Tech Ops dedicated to the study and preservation of life.

	M	O	G	A
STR	8	9	10	11
DEX	10	11	12	13
CON	8	9	10	11
INT	10	11	12	14
WIL	9	10	11	12
PER	9	10	11	11
Action check	10/5/2	12/6/3	13/6/3	14/7/3
#Actions	2	2	2	3

Marginal Skills: Knowledge-computer; Life-biology; Medical-knowledge, treatment; Physical Science.

Ordinary Skills: Vehicle Operation; Medical-knowledge 2, psychology, surgery, treatment 2; Physical-chemistry; Investigate; Interaction.

Good Skills: Knowledge-deduce; Life-biology 3; Medical-forensics, knowledge 3, surgery 2, treatment 4; System Operation; Administration-bureaucracy; Investigate; Teach-Tech Op; Interaction-charm.

Amazing Skills: Business; Life-xenology; Medical-forensics 2, knowledge 4, surgery 5, treatment 8, xenomedicine; Creativity; Teach-Tech Op 3; Leadership-command, inspire.

Equipment: Forensics kit, life support pack, medical gauntlet, pharmaceuticals, surgical kit, trauma pack I.

Laborer

Even advanced societies require unskilled and semi-skilled Tech Ops. Many colonies, mining outposts, and stations remain manpower-intensive far into the future.

	M	O	G	A
STR	10	11	12	13
DEX	9	10	11	11
CON	10	11	12	14
INT	8	9	10	11
WIL	9	10	11	12
PER	8	9	10	11
Action check	8/4/2	10/5/2	11/5/2	12/6/3
#Actions	2	2	2	3

Marginal Skills: Athletics; Unarmed-brawl; Stamina-endurance; Street Smart.

Ordinary Skills: Athletics-throw, specific sport; Melee-blade, bludgeon; Stamina-endurance 2; Street-knowledge; Vehicle-land.

Good Skills: Unarmed-brawl 3; Stamina-endurance 3, resist pain; Business; Technical Science; Administration; Deception-gamble; Interaction-bargain.

Amazing Skills: Melee-blade 3, bludgeon 3; Stamina-endurance 4; Knowledge-hobby, first aid; System Operation; Technical-juryrig, repair; Street-knowledge 4, criminal; Leadership.

Equipment: jumpsuit, lifting harness, combat knife.

Military Officer

Officers are usually Diplomats who select Combat Spec as their secondary profession. They may serve as advisers, security chiefs, or consultants to private enterprises.

	M	O	G	A
STR	9	10	11	12
DEX	9	10	10	11
CON	9	10	11	11
INT	9	10	11	12
WIL	10	11	11	13
PER	8	10	12	13
Action check	9/4/2	11/5/2	11/5/2	12/6/3
#Actions	2	2	2	3

Marginal Skills: Modern Ranged Weapons; Vehicle Operation; System Operation; Tactics; Leadership.

Ordinary Skills: Armor Operation; Modern-pistol, rifle; Vehicle Operation; Knowledge-computer, military history; System-sensors; Investigate-interrogate.

Good Skills: Unarmed-power; Modern-rifle 2, pistol 2; Vehicle-space; Navigation; System-weapons; Tactics-infantry; Leadership-command 2, inspire.

Amazing Skills: Tactics-infantry 3, space 3, vehicle 3; Leadership-command 6, inspire 4.

Equipment (ground): Fatigues, comm gear, GPS receiver, imaging goggles, notepad computer with survey program, automedic, armor (battle jacket for light duty, combat or powered armor for field duty), 11mm charge rifle, 15mm sabot pistol.

Equipment (air/space): Jumpsuit, zero-g web, comm gear, notebook computer with navigation and science programs, automedic, battle jacket, zero-g pistol.

Law Enforcer

A trained police officer or constable falls into this category of Combat Spec.

	M	O	G	A
STR	9	10	11	12
DEX	10	11	12	13
CON	9	10	11	12
INT	9	10	11	12
WIL	8	9	10	12
PER	9	10	11	11
Action check	9/4/2	13/6/3	14/7/3	15/7/3
#Actions	2	2	2	3

Marginal Skills: Melee-bludgeon; Modern-pistol; Vehicle Operation; Law.

Ordinary Skills: Vehicle-land; Knowledge-first aid; Law-enforcement; Investigate-interrogate; Street-criminal, knowledge; Interaction.

Good Skills: Melee-bludgeon 2, powered; Modern-pistol 3, rifle; Law-enforcement 3; Security; Investigate-interrogate 2, search, track; Interaction-intimidate.

Amazing Skills: Modern-pistol 6; Law-court, enforcement 6; Security-protocols 3, devices; Leadership-command.

Equipment: Comm gear, weapon detector, smart holster, handcuffs, 9mm charge pistol, stun baton.

Reporter

Whatever the medium, this Free Agent's mission is to discover the truth and inform the public.

	M	O	G	A
STR	8	9	10	10
DEX	9	10	11	11
CON	8	9	10	11
INT	9	11	12	13
WIL	10	11	12	14
PER	9	10	11	13
Action check	9/4/2	12/6/3	13/6/3	14/7/3
#Actions	2	2	2	3

Marginal Skills: Creativity-journalism, photography; Investigate; Street Smart; Deception; Interaction-charm, interview

Ordinary Skills: Stealth-shadow, sneak; Vehicle Operation; Knowledge-deduce; Investigate-search, track; Interaction-charm 2, seduce.

Good Skills: Manipulation; Business; Law; Security; Administration; Creativity-journalism 3; Resolve; Culture-etiquette (specific); Deception-bluff, bribe.

Amazing Skills: Modern-pistol; Stealth-shadow 3, sneak 3; Computer Science; Knowledge-deduce 3; Investigate-search 3, track 3; Resolve-mental; Interaction-charm 4, interview 3, seduce 2.

Equipment: Audiorecorder, videorecorder, business suit, comm gear, surveillance gear, stutter pistol.

Scientist

In classic stories, these Tech Ops lurk in lonely research outposts and secret laboratories.

	M	O	G	A
STR	8	9	10	11
DEX	9	10	12	12
CON	8	9	10	11
INT	10	11	12	14
WIL	10	11	11	12
PER	9	10	11	12
Action check	9/4/2	11/5/2	13/6/3	14/7/3
#Actions	2	2	2	3

Marginal Skills: Computer Science; Knowledge; Life Science; Physical Science; Technical Science.

Ordinary Skills: Vehicle Operation; Two science specialty skills at rank 1; Two science specialty skills at rank 3; System Operation; Investigate.

Good Skills: Modern Ranged Weapons; Knowledge-deduce; Rank 1 science specialty skills improved to rank 2; Rank 3 science specialty skills improved to rank 4; System-sensors; Administration-bureaucracy; Investigate; Teach-Tech Op; Interaction.

Amazing Skills: Modern-pistol; Business; Rank 2 science specialty skills improved to rank 4; Rank 4 science specialty skills improved to rank 6; Creativity-academic writing; Teach-Tech Op 3.

Equipment: Jumpsuit or e-suit, sensor gauntlet, comm gear, notebook computer, stutter pistol in dangerous areas.

Soldier

Trained Combat Specs are found amongst every settlement. Mercenaries fall into this category, but most soldiers are members of the military.

	M	O	G	A
STR	9	10	11	12
DEX	10	11	12	13
CON	10	11	12	13
INT	8	9	10	11
WIL	9	10	11	12
PER	8	9	10	11
Action check	9/4/2	13/6/2	14/7/3	15/7/3
#Actions	2	2	2	3

Marginal Skills: Armor Operation; Athletics; Unarmed Attack; Modern Ranged Weapons; Vehicle Operation; Stamina.

Ordinary Skills: Armor-combat; Heavy Weapons; Unarmed-brawl; Modern-pistol, rifle 2; Stamina-endurance, resist pain; Knowledge-first aid; Interaction.

Good Skills: Armor-combat 3, powered; Athletics-climb, throw; Melee Weapons; Heavy-direct; Modern-pistol 2, rifle 3, SMG; Stamina-endurance 3; Survival.

Amazing Skills: Armor-powered 3; Melee-blade, powered 3; Modern-pistol 3, rifle 5; Survival-training (specific); Tactics-infantry 3, vehicle; Leadership-command 3.

Equipment: Fatigues, comm gear, imaging goggles, battle jacket (light duty) or attack armor (field duty), 11mm charge rifle (field duty), or autoflechette SMG (security detail), 6 fragmentation grenades, combat knife.

Spacehand

Zero-g workers, crewmen, able-bodied spacehands, miners, and other Tech Op workers use this template.

	M	O	G	A
STR	10	11	12	13
DEX	9	10	11	12
CON	9	10	11	13
INT	9	10	11	11
WIL	9	10	11	12
PER	8	9	10	11
Action check	9/4/2	11/5/2	12/6/3	12/6/3
#Actions	2	2	2	3

Marginal Skills: Unarmed-brawl; Technical Science; System Operation.

Ordinary Skills: Athletics; Modern Ranged Weapons; Vehicle Operation; Stamina-endurance; System-engineering; Technical-juryrig; Interaction.

Good Skills: Unarmed-brawl 3; Vehicle-space; Business; Administration; Street Smart; Deception-gamble; Interaction-bargain 3, charm.

Amazing Skills: Athletics-climb; Stamina-endurance 3; Knowledge-hobby, first aid; System-communications, engineering 3, sensors; Technical-juryrig 3, repair 2; Interaction-taunt; Leadership.

Equipment: Jumpsuit, magnetic boots, vacuum mask, zero-g web, toolkit, zero-g pistol, combat knife.

Spy

This Free Agent is a member of an organization that needs people trained in espionage, security, sabotage, or surveillance.

	M	O	G	A
STR	8	9	10	11
DEX	9	10	11	12
CON	8	9	10	11
INT	9	11	12	13
WIL	10	11	12	13
PER	10	10	11	12
Action check	9/4/2	12/6/3	13/6/3	14/7/3
#Actions	2	2	2	3

Marginal Skills: Modern-pistol; Stealth-shadow; Security-protocols; Deception-bluff, bribe; Interaction.

Ordinary Skills: Acrobatics-defensive, dodge; Manipulation; Stealth-sneak; Vehicle Operation; Stamina; Interaction-interview, charm, seduce.

Good Skills: Acrobatics-daredevil; Modern-pistol 2, SMG; Stealth-hide; Stamina-resist pain; System Operation; Investigate; Resolve; Culture-etiquette (specific).

Amazing Skills: Modern-pistol 3, rifle, SMG 2; Stealth-hide 2, shadow 3, sneak 3; Investigate-search 2; Resolve-mental 2, physical 2; Interaction-charm 3, interview 3, seduce 3.

Equipment: Business suit with antiscan weave, comm gear, lockpick set, surveillance gear, 9mm charge pistol.

Trader

This is the typical independent merchant, a fast-dealing Diplomat and entrepreneur with a dozen irons in the fire.

	M	O	G	A
STR	8	9	10	11
DEX	9	10	11	11
CON	8	9	10	11
INT	9	10	11	12
WIL	10	11	12	13
PER	10	11	12	14
Action check	9/4/2	11/5/2	12/6/3	12/6/3
#Actions	2	2	2	3

Marginal Skills: Vehicle-space; Business; Knowledge-computer; Culture; Interaction-bargain, charm.

Ordinary Skills: Business-illicit, small; Manipulation-lockpick, pickpocket; Street Smart; Deception; Interaction-bargain 3, intimidate.

Good Skills: Business-corporate, illicit 2, small 2; Law; Investigate; Culture-etiquette (specific) 3, etiquette (specific); Street-criminal, knowledge; Resolve-mental; Deception-bribe, bluff.

Amazing Skills: Business-corporate 2, illicit 4, small 4; Knowledge-deduce 3; Administration-bureaucracy, management; Deception-bribe 3, bluff 3, gamble; Interaction-bargain 6, charm 3; Leadership.

Equipment: Cellular phone, notebook computer, concealed holster, short CF coat, laser pistol.

A blue-toned illustration of a man with sunglasses and a woman with long hair in a sci-fi setting. The man is in the foreground, looking off to the side. The woman is in the background, looking up. The background is filled with stars and a bright light source.

CHAPTER 7

ATTRIBUTES

This chapter examines how heroic personalities are built and incorporated into your game universe. A newly created hero is simply a fictional character—the star of a movie or the protagonist of a book—who’s waiting to see what the story is going to be. Defining the hero’s personality, ambitions, and place in the world represents final touches in the hero creation process. Since these final touches affect your campaign setting as much as the hero’s place in it, the process demands your involvement.

MOTIVATION

Don't feel constrained by the motivations that appear in the *Player's Handbook*. You can use anything as a character motivation. Encourage your players to think up new motivations when they create their characters and fashion their backgrounds and histories. Interesting and believable motivations transform a simple, stock villain into a memorable three-dimensional nemesis who will keep your players busy for a long time.

The best way to use motivations is to choose two for each hero or supporting cast member and see how they interact. For example, players can easily couple the Winning Is Everything and Vengeance motivations: The hero wants to gain skill in order to make his revenge possible. If you joined the esoteric pursuit of science (Yearn to Learn) with Can't Get Enough or Personal Power, you might create the perfect villain for your campaign: a brilliant, evil genius determined to use his knowledge to enrich himself.

Motivation is one of the most useful adventure design tools you have at your disposal. If a player is portraying his hero accurately, he'll be interested in adventure opportunities that further his hero's personal goals, and he'll avoid distractions that might pull him away from realizing those goals. Knowing that the heroes have a reason to embark on an adventure or react in a certain way to a supporting character makes it much easier to plan out adventures that will seize your players' imaginations and fire their interest.

MORAL ATTITUDE

Moral attitude describes how a hero goes about his heroic (or villainous) career. Everybody knows that Gallant characters don't take hostages or shoot prisoners, while an Unscrupulous character will do anything it takes to get what he wants. Both characters might have the same motivation (Helping Others, perhaps, or maybe Fun First), but the ways in which they pursue their goals are different.

What sort of morality do the players choose to adopt for their heroes? It takes imagination and maturity to portray a hero with a strong moral commitment, just as it does to play an amoral protagonist whose morality is defined by the people he chooses to fight against.

Moral attitude shouldn't be a stat that a player rolls against or a tool that you use to build adventures for the heroes. It's an effort on the part of a player to make the story decisions that his hero would make.

You have the right to reject any moral attitude that seems poorly thought out or inappropriate. You shouldn't take that step lightly. Consider sitting down and talking to your players, and telling them a little about the flavor you're looking for in your game. Be prepared to negotiate. It's the player's privilege to play the character he wants. Look for ways to make any moral attitude work in the context of the adventure.

Watch out for conflicting moral attitudes between members of the same adventuring group. If your

players portray their characters accurately, an Ethical and an Unscrupulous hero will conflict with each other. Sometimes conflict can stimulate intense roleplaying. However, such tension can lead to conflict between players, which ultimately spoils the game. You shouldn't dictate the moral attitude of any hero, but it might not be a bad idea to ask players to choose attitudes with the other heroes in mind.

Encourage your players to define roles for their heroes that build on their moral attitudes in a constructive fashion. For example, the smuggler captain might be Corrupt, willing to break laws or agreements for material gain, but it doesn't mean that she's irredeemably evil. She may be brave, loyal, and faithful, dedicated to battling injustice and wrong wherever she finds it, but still willing to allow nonviolent evils to pass by unchallenged. While she's not the right hero to clean up the town's seedy underside, she'll stand shoulder to shoulder with the other heroes against the alien invaders.

CHARACTER TRAITS

Character traits represent style—how does the hero conduct himself when in action? Traits are the finishing touches to the character sketch, the idiosyncrasies and quirks that bring a character to life. A hero should change motivation or moral attitude only in the most unusual of circumstances, but character traits may surface or fade away without

Rewards for Roleplaying

To encourage attention to character and good roleplaying, you have the option of rewarding the hero of a player who exemplifies his hero's characteristics in play with an extra achievement point. Evaluate the players' efforts when you would normally award achievement points.

Not every player should earn a bonus achievement point in every adventure. Weigh the player's actions, words, and decisions over the course of the game session before you decide that his play merits a reward. If a player claims his hero has a Virtuous moral attitude but plays him like he's Unscrupulous, he clearly doesn't earn the award.

A rule of thumb to help you decide which heroes merit an additional achievement award is to ask yourself which player gave the best depiction of a motivation, which provided the best demonstration of a moral attitude, and which showed the best portrayal of character traits. Each of these three characters might earn a bonus for roleplaying well—but only if their players didn't ignore or contradict the other roleplaying characteristics that comprise their heroes. You might have been impressed by a Gallant hero's incessant optimism throughout the adventure, but if the same hero made some highly Selfish decisions, he shouldn't get the award based on the portrayal of a character trait alone.

much consequence. You don't need them in the game, since the way a player handles his hero constitutes the major definition of the character's personality, but they can be good reminders to your players of how to stay in character.

You can add any reasonable personality trait or attitude to the list of roleplaying attributes. Encourage players to use their imaginations and build characters with engaging, multifaceted personalities. Real people aren't one-dimensional caricatures; a well-written fictional character isn't, either. Take some time to ask players why their characters are lazy, selfish, or brave. If a player doesn't have a ready answer, he might be moved to think about who his character is and how he came to be that way.

HEROES WITH HISTORY

A hero's background should be reflected in the roleplaying attributes the player selects. A close look at the history and personality a player decides to include in a hero provides some excellent insights into what type of hero this character should be. It's one of your jobs to point out possible connections or relations between the hero's background, motivations, career, skill selection, and character traits.

For example, consider the player who selects the character flaw of Dirt

Poor. How did the hero become destitute? Was he born into squalor, or did the hero do something to deserve wretched poverty? Has poverty led him to become motivated by greed, desiring nothing more than to climb out of the economic gutter? Or does he come from a society unconcerned with poverty or wealth?

Lack of wealth might be caused by a lack of Culture or Interaction skills. If the hero grew up as a street urchin in the urban wastelands of an industrial planet, it might be hard for him to deal with people from the middle and upper classes of the society. He might favor pushing his luck through blustering or intimidation, since that's the way he is used to dealing with people back home. On the other hand, he may grow nervous and uncomfortable around superiors, lapsing into sullen silence or relying on strained humor. The possibilities are infinite. The same street urchin could grow up to be a charming hustler, carefully hiding the evidence of a low upbringing.

A well-built character is more than a collection of individual parts. The synergy resulting from the clash of background, motivations, and the other elements that make up a character create memorable heroes that compare favorably with the best-loved characters of science fiction literature. Encourage your players to develop their heroes in the creation process and during play.

SETTING CHARACTERS IN THE STORY

A campaign must provide a way for every hero to fit into the setting and the adventures that take place within it. Each hero has a unique background, history, goals, and personality. When you help a player develop these traits, you're giving the player a more believable and well-rounded hero, one that the player understands and likes from the start.

You can create a decent character history with just a few notes. Where was the hero born? What's his family like? Why did he decide to choose the profession and career that he did? What kind of education did he receive? Why is he getting involved in the story at hand?

You have a variety of ready-made histories and motivations to draw from in the world around you. Corporations, military services, and government administrations all employ heroic characters. Adventures take place as these organizations send heroes into trouble spots. A hero hired to troubleshoot a computer system on a distant outpost is a believable, realistic character, with a ready-made excuse to head off into the adventure you've planned.

Background

People in real life define themselves through their backgrounds—home, family, friends, and place of origin are the foundations of an individual's personality and motivation. Well-developed fictional characters are no different. Not all people react to their upbringing and situation in the same way; one character from a rural, depressed area might enlist in the military in order to escape his hometown; another might work through college on scholarships and night jobs, becoming a research scientist. Each character started with the same opportunities, but chose a different path.

A player shouldn't have to write a complete biography of his hero, but it might help to have an idea of how the hero came to be. His background might suggest special skills, talents, or contacts he should have. It also may point out unresolved stories or conflicts the hero may have to deal

with. Failures and setbacks are just as important in forming a hero as successes and accolades.

Work with your players to create the outline of a good history and background for each character. Let the player do most of it—the hero is his or hers to play, after all. If a player develops a hero who just won't fit in your game, offer compromises or suggestions that will help him fit in. When a player presents a hero without any background, ask some questions: "Where did this guy come from? What's he doing out in space?" and see what the player comes up with.

Problem Backgrounds

Some heroic backgrounds can present difficulties. Heroes who begin as high-ranking officers, important politicians, or top corporate executives may have resources that beginning heroes shouldn't have. Heroes who have too much money or power in their hands cannot be challenged in most adventures.

That said, nothing is impossible. You can allow unusual position or rank with a little work. Maybe the character's authority won't be recognized—imagine a planetary governor whose first job is to pacify an entire outlaw world with only a system cutter and a half-dozen aides.

A corporate hotshot might be in the doghouse, a virtual exile in a nasty job that no one else wants. His requests for funds and equipment could be lost, misplaced, or ignored with depressing regularity. Wealthy heroes can be temporarily down on their luck, and high-ranking military officers might be assigned to disorganized or neglected sectors.

On occasion, you can allow a player to create a hero with an unusual amount of power and authority for the sake of a good campaign scenario. For example, let a hero to be the captain or commander of a military or survey vessel. Although he's subject to orders from fleet superiors, this can develop into a campaign in which the heroes can seek out new life and new civilizations, and boldly go where no one has gone before.

Evolving Backgrounds

Over time, a hero's background might grow, change, or develop into a major element of your campaign. Use story hooks that backgrounds



suggest to create adventures that have an immediate and obvious significance to the heroes. As a hero resolves his early motivations or defeats old villains, his background might change. New motivations and new adventures bring a natural evolution to the game, and changes during play keep the heroes and the campaign interesting.

CONTACTS & ALLEGIANCES

Many heroes have access to a special resource in the form of a person or organization they can call on in times of need. A *contact* is an individual or small group of individuals that have the power to assist the hero in some way. Unlike a contact, an *allegiance* represents a person or organization to whom the hero owes loyalty—a corporation, government agency, military organization, or similar group. Any hero can choose to begin a game with an allegiance, and some backgrounds or career packages logically require a beginning hero to choose an allegiance.

Contacts

Each contact a hero has should be developed as a supporting character. If the contact is in a risky occupation or brought into the line of fire by the hero, fill out a complete hero sheet. However, if the contact isn't going to get shot at or be called upon to make skill checks, leave the description as a simple sketch of a few notes.

Contacts don't normally accompany heroes on adventures, unless a task is of compelling interest to the contact. The purpose of a contact is to provide information, resources, or expert skills. Contacts differ from the followers, allies, and sidekicks described in the previous chapter. Most of them aren't inclined to risk their lives or their prosperity for a hero.

When a player chooses a contact for his hero, you should decide how much assistance the contact can provide. A rule of thumb is that the more powerful, important, or wealthy the contact is, the less time the contact has for the hero. If a hero lists the planetary governor as a contact, it should become clear that the governor is hard to reach and constrained by the merciless gaze of public scrutiny. It might be wiser to have some-

one in the governor's office as a contact, a person who is easier to reach and less conspicuous than the most important person on the planet.

Information

An information contact can discover things the heroes normally couldn't find out. You can use this character as a mouthpiece when you need to pass information to the heroes during an adventure. Other times, the players might think of asking their contacts for help when they don't know what they should be doing.

Information Contacts

bartender	mobster
bouncer	night watchman
bum	prostitute
cop	reporter
entertainer	secretary
gang member	store owner
hacker	taxi driver
merchant	trader

Resource

A resource contact can provide whatever you want to give the heroes—equipment, money, personnel, or transportation. A soldier hero may not be able to take his battle armor into a starport under normal conditions, but a resource contact might be able to obtain a suit for special training purposes. Resource contacts may have subordinates whose services a hero needs. Obviously, the contact might get bent out of shape if the hero is careless or indiscreet with the resource he's been given.

Resource Contacts

bureaucrat	mob boss
corporate	police captain
executive	politician
crime boss	ship captain
gang boss	supply
government	sergeant
official	union boss
military officer	

Expert

Expert contacts have skills or abilities that the heroes don't have. Usually, the hero brings a situation to his contact's attention and asks the contact to address it. For instance, a hero might need to analyze a stellar

event such as supernova—if his contact is a noted astrophysicist, he could bring a recording over to the observatory and ask his friend to take a look.

Expert Contacts

agent	investigator
bureaucrat	mechanic
doctor	paramedic
engineer	scholar
fence	scientist
forensic	soldier
examiner	spacehand
gridpilot	surgeon
historian	technician

Other Contacts

A contact can be just about any kind of character that a player can imagine. Even a library clerk can help the heroes out by permitting admission into restricted archives or allowing them to do research after hours.

Allegiances

Much like a contact, an allegiance acts as a source of information, resources, and general help for a hero. Unlike a contact, an allegiance represents a tie to a larger organization. As a result, an allegiance has the potential to produce correspondingly greater effects than a contact.

The downside of an allegiance is that the hero may be subject to orders and policies that restrict the hero's actions and force the hero to do things contrary to personal desires. Another disadvantage is that people who don't care for the hero's organization won't think much of the hero either. Agents of rival organizations view him as an enemy.

For the Gamemaster, an allegiance provides a ready and easy means to direct a hero. A command from a hero's organization can manipulate him into all sorts of adventures. Since the organization views the hero as an employee, it will hand out tasks for the hero to perform.

Using Contacts and Allegiances

It shouldn't require a skill check for a hero to make use of a contact or allegiance. Asking a local criminal about gang activity is simply smart play.

A skill check may be appropriate when a hero attempts to acquire ex-

Acquiring Contacts

A Diplomat hero begins play with a contact. This character is usually an individual featured in the hero's background that is appropriate.

Additional contacts are developed through good roleplaying or thoughtful treatment of allies or supporters. During play, the heroes will encounter dozens if not hundreds of characters. With kind treatment, heroism, and generous gifts, members of your supporting cast may form a bond with a hero as a contact.

Another way you may allow heroes to acquire contacts is through an achievement benefit. Achievement benefits, discussed in the next chapter, are purchased as a character increases in power and level. Diplomat characters can purchase a contact for 3 skill points. Free Agents pay 4 skill points per contact, and other heroes pay 5 skill points per contact.

Finally, you can assign contacts as you see fit. Often, you may give contacts to make the hero more involved in your campaign.

ceptionally sensitive information, requisition unusual resources, or call upon his contact or allegiance in areas outside its normal territory or jurisdiction. Interaction, Business, and Street Smart are commonly used when associating with contacts; Administration, Business, and Interaction are useful in dealing with allegiances.

Once you've selected the most appropriate skill for a hero to use, several modifiers may apply. If the hero has irritated, insulted, or abused his connection in the past, the skill check should suffer a penalty. If the hero has been extremely generous with a contact or demonstrated loyalty to an allegiance, apply a bonus instead. In addition, modifiers may be called for if the hero attempts to make use of his contact or allegiance

in an inappropriate situation, or far from its base of operation.

◆ **Example:** A hero seeking scientific advice from his crime boss contact suffers a +2 penalty to the skill check. It's not that the crime boss is unwilling to help—he just knows nothing about science and probably doesn't know anyone who does.

The grade of success governs the type and degree of assistance a hero receives. Some rough guidelines:

Critical Failure: No help is forthcoming.

Marginal success: Information is partial or outdated, resources may be delayed or inadequate, or an expert might have to ask permission before he can work on the problem.

Ordinary success: Information is sufficient to steer the heroes toward their next goal. Resources fulfill the hero's needs. An expert can examine the situation and make a skill check.

Good success: Requested information is detailed and accurate, possibly allowing the heroes to skip an intermediary step or approach the next part of the adventure with a dis-

tinct advantage. Resources include top-notch personnel or exceptionally fine equipment. The expert can consult with others in his field, gaining a bonus on his own skill check.

Amazing success: The requested information is extremely accurate, granting the heroes a significant advantage in the next part of the adventure. Any request for resources is evaluated as crucially important, and the heroes receive personnel, materials, or funds well in excess of what they thought they would need. An expert has access to specialized knowledge in the very field the heroes need, and automatically succeeds in analyzing the situation.

Losing Contacts and Breaking Allegiances

It can be difficult to keep track of contacts or allegiances over the course of a campaign. Since contacts are maintained by story decisions and roleplaying, they can be alienated or lost in the same way. A hero who is rude or ungrateful to his contact is likely to find that his contact isn't willing to help him the next time he's in town. Similarly, a hero who violates his organization's code of ethics, policies, or laws of conduct may find himself unemployed or even wanted for criminal actions.

You have the option of terminating a contact or even an allegiance by means of events in the campaign. Contacts die in the line of duty—perhaps while coming to the hero's aid. They can retire, change jobs, or relocate. Meanwhile, agencies, military organizations, and even nations may fall into ruin, effectively ending an allegiance. While these incidents may produce fantastic material for the campaign's story, it's generally

Sample Allegiances

- ▶ **National government.**
- ▶ **National military:** Most nations possess branches devoted to air, sea, land, and space.
- ▶ **National agency:** Any bureau, agency, or department. Options include culture, commerce, exploration, intelligence, investigation, police, science, survey, or trade.
- ▶ **Local system or regional office:** A local police force, agency, or military unit.
- ▶ **Corporate:** Divisions include acquisitions, advertising, intelligence, marketing, production, sales, and security.
- ▶ **Private enterprise:** Smaller trading leagues and guilds.



Medical scanner

TABLE 625: STARTING SOCIAL STATUS

Authority	Wealth	Fame	Profession
+4	+2	0	Combat Spec
+3	+2	+1	Free Agent
+2	+3	+1	Tech Op
+4	+4	+4	Diplomat
+1	+3	+2	Mindwalker
			Career
+2	0	+1	Ambassador
+1	+1	0	Bodyguard
+1	0	+1	Bounty hunter
0	0	-1	Brawler
+1	0	+1	Cleric
+1	+1	0	Computer tech
0	+2	+1	Corporate merchant
+1	+2	+1	Doctor
0	+1	+1	Engineer
-1	+1	+2	Entertainer
+1	0	+1	Explorer
+2	0	+2	First contact consul
0	+1	+2	Gambler
+1	0	0	Gunner
0	+1	-1	Hacker
+2	0	0	Law enforcer
+1	-1	+1	Martial artist
0	+1	0	Mercenary
+1	+1	+1	Pilot
+0	+1	+1	Reporter
0	0	+1	Scholar
0	0	+1	Scientist
+1	+1	+1	Security specialist
+1	0	0	Spacehand
+2	0	0	Soldier
+1	+2	0	Spy
0	+1	+3	Stellar noble
0	+2	0	Trader
			Perk
0	+1	+3	Celebrity
0	+3	+1	Filthy Rich
0	0	+1	Good Luck
+1	0	+1	Powerful Ally
+2	0	+1	Reputation
			Flaw
0	0	-1	Bad Luck
0	-2	-2	Dirt Poor
-2	0	-1	Infamy
-1	0	-1	Primitive
-1	0	0	Spineless
+2	+1	+1	Allegiance

best to minimize such comprehensive changes. You can also consider allowing the character to develop a new contact with the old one's successor, or swear an allegiance to a new organization.

SOCIAL STATUS

Achievement points measure advances in fighting power, technical or social skills, and overall competence. Another way to record a hero's progress through the campaign is the hero's *social status*. These optional rules describes how high a hero has climbed on society's ladders. Is he a junior operative, a top-notch field commander, or a director?

A hero may be a level 20 Free Agent and the toughest operative in his organization, but still take orders from lower-level characters with a social status higher than his. Competence and ability do not always bring success in society.

Social status is divided into three categories: *authority*, *wealth*, and *fame*.

Authority

Authority is a gauge of a hero's importance in the campaign, although it isn't as fair or absolute as a hero's experience level. Some heroes prefer to remain anonymous, avoiding the duties and obligations that come with a standing in the world. Other heroes gladly accept the challenges of a higher station. By elevating his social status, a hero declares his intention to control events in the world, instead of responding to events driven by outside forces.

Heroes with a high authority level occupy positions of power. They're high-ranking military officers, important elected officials, corporate executives, department heads, or senior bureaucrats and administrators. They gain strong allegiances to specific organizations and the ability to bring the organization's resources to bear on situations they encounter.

Wealth

Social status also serves as a measure of a hero's wealth, finances, and investments. Wealthy heroes may be able to afford starships, planetary bases, or other extremely expensive

TABLE G26: SOCIAL STATUS

Level	Description	Level	Description
0	Convicted felon, slave <i>Authority:</i> +5 penalty <i>Wealth:</i> None <i>Fame:</i> +5 penalty	11	Staff officer, junior executive, local administrator <i>Authority:</i> -2 bonus <i>Wealth:</i> \$6,000/month <i>Fame:</i> no modifiers, 2 contacts
1	Conscript, prisoner, indentured worker <i>Authority:</i> +4 penalty <i>Wealth:</i> \$500/month <i>Fame:</i> +4 penalty	12	Line officer, executive, local representative <i>Authority:</i> -2 bonus <i>Wealth:</i> \$7,000/month <i>Fame:</i> -1 bonus, 4 contacts
2	Enlistee, apprentice, laborer <i>Authority:</i> +3 penalty <i>Wealth:</i> \$1,000/month <i>Fame:</i> +3 penalty	13	Command officer, assistant director, district representative, regional celebrity <i>Authority:</i> -2 bonus <i>Wealth:</i> \$8,000/month <i>Fame:</i> -1 bonus, 6 contacts
3	Junior enlisted man, intern, laborer <i>Authority:</i> +2 penalty <i>Wealth:</i> \$1,500/month <i>Fame:</i> +2 penalty	14	Senior command officer, director, department chief <i>Authority:</i> -3 bonus <i>Wealth:</i> \$10,000/month <i>Fame:</i> -2 bonus, 8 contacts
4	Mid-ranking enlisted man, administrative assistant <i>Authority:</i> +1 penalty <i>Wealth:</i> \$2,000/month <i>Fame:</i> +2 penalty	15	Junior flag officer, junior vice president, national representative <i>Authority:</i> -3 bonus <i>Wealth:</i> \$15,000/month <i>Fame:</i> -2 bonus, 10 contacts
5	Senior enlisted man, executive assistant <i>Authority:</i> no modifiers <i>Wealth:</i> \$2,500/month <i>Fame:</i> +1 penalty	16	Flag officer, vice president, national celebrity <i>Authority:</i> -3 bonus <i>Wealth:</i> \$25,000/month <i>Fame:</i> -3 bonus, 12 contacts
6	Top enlisted man, technician, assistant manager <i>Authority:</i> no modifiers <i>Wealth:</i> \$3,000/month <i>Fame:</i> +1 penalty	17	Senior flag officer, senior vice president, agency director <i>Authority:</i> -4 bonus <i>Wealth:</i> \$50,000/month <i>Fame:</i> -3 bonus, 15 contacts
7	Noncommissioned officer, supervisor, specialist <i>Authority:</i> no modifiers <i>Wealth:</i> \$3,500/month <i>Fame:</i> no modifiers	18	Joint command officer, corporate board member, interstellar representative, planetary ruler <i>Authority:</i> -4 bonus <i>Wealth:</i> \$100,000/month <i>Fame:</i> -4 bonus, 18 contacts
8	Warrant officer, junior manager, technical expert <i>Authority:</i> -1 bonus <i>Wealth:</i> \$4,000/month <i>Fame:</i> no modifiers	19	Armed services chief, corporate CEO, interstellar celebrity <i>Authority:</i> -4 bonus <i>Wealth:</i> \$200,000/month <i>Fame:</i> -4 bonus, 25 contacts
9	Junior officer, manager, field agent, local celebrity, community leader <i>Authority:</i> -1 bonus <i>Wealth:</i> \$4,500/month <i>Fame:</i> no modifiers	20	Commander-in-chief, megacorporate CEO, interstellar ruler <i>Authority:</i> -5 bonus <i>Wealth:</i> \$1,000,000/month or more <i>Fame:</i> -5 bonus, 50 contacts
10	Officer, local manager, field leader <i>Authority:</i> -1 bonus <i>Wealth:</i> \$5,000/month <i>Fame:</i> no modifiers, 1 contact		

Changing Social Status

When a hero's actions are particularly noteworthy or contemptible, use a change in social status to reflect his new standing. Promotions, awards, demotions, or suspensions may change a hero's authority level, business successes or lidoses could result in a gain or loss of wealth, and publicized heroism or criminal charges might result in a new fame level.

Raw material wealth doesn't always improve a hero's standing; a hero who comes into a lot of money must invest it in order to raise his monthly income. Also, authority and fame may not be directly affected by a change in wealth.

If you decide to improve or diminish a hero's social status, it's a good idea to allow an overall change of no more than one status level at a time, or up to two status levels in one of the three categories. For example, an espionage specialist might get a big promotion to the rank of field leader, raising her authority by two levels—but her wealth and fame levels shouldn't increase by more than one.

Another way you may allow heroes to improve social status is through an achievement benefit. Achievement benefits, discussed in the next chapter, are purchased as a character increases in power and level. Each increase in authority, wealth, or fame is individually purchased. The cost is equal to the social status level desired. Thus, it costs 6 skill points to increase authority level from 5 to 6. To increase authority, wealth, and fame from level 5 to 6 costs a total of 18 (3×3) skill points. This benefit can be purchased by any character at any achievement level.

purchases. Through ownership of profitable enterprises, wealthy characters exert influence of their own.

One effect of a high wealth level is a steady flow of money into the character's account. Even if he doesn't spend time pursuing business interests, his existing investments and enterprises earn money for him. At the highest levels of wealth, characters could pull in thousands or millions of dollars every month.

Fame

Some people wield influence out of proportion to their authority or wealth. Famous celebrities, retired politicians, and renowned scientists are examples. People respect and fear those whom they regard as their social superiors; this translates to contacts and bonuses in encounter scenes for a character with a high fame level.

The Social Status Scale

Social status is broken into 21 levels, ranging from 0 to 20. It's likely for a hero to have different levels in the three categories; for instance, a hero with lots of money but no special position or authority may have a social status of 7/15/8 for authority, wealth, and fame, respectively. Military offi-

cers and civil servants usually wield more authority than wealth or fame; a starship commander might have a status of 14/8/8.

A hero's authority level gives him a bonus or penalty in dealing with organizations allied to or associated with his position. This may be applied to Administration, Business, Law, Investigate, Street Smart, or Leadership.

Wealth level describes how much money the hero commands for his principal employment or business investments. The number listed is a rough estimate, which you may adjust. If you allow heroes to collect salaries, you should use the rules on "Income and Finances" later in this chapter for spending and receiving money—if heroes don't have any bills to pay, the monthly income listed on TABLE G26: SOCIAL STATUS will probably be too much to hand out.

Fame level gives the hero a bonus in dealing with individuals who are aware of his status and likely to be impressed by it. It could also provide a penalty to encounters in situations where fame is expected and a hero has a low fame level. Skills this bonus may apply to include Administration, Business, Culture, Deception, Interaction, and Leadership. A character with a high fame level gains bonus contacts. These contacts are people whom the hero sponsors,

associates with, or supports in some way. For instance, a high-profile hero may be friends with a local governor because he offered financial support and an endorsement in the governor's last reelection campaign.

Starting Social Status

The social status of a beginning hero depends on profession, career, background, and the perks and flaws the player selects. Use TABLE G25: STARTING SOCIAL STATUS. Heroes start with a social status of 0 in each category. If a character is using a career not listed on the table, or no career at all, choose a career that most closely matches the character's concept.

◆ **Example:** Raiaza is a fearsome weren. She's a Combat Spec and soldier, with the Primitive flaw and an allegiance. Her social status is 7/3/0. While neither rich nor famous, Raiaza has the ability to command in her organization. Meanwhile, Jack Everstar begins play as a dashing actor of some fame. He's a Diplomat and entertainer with the Celebrity perk. With a social status of 3/6/9, Everstar has almost no ability to issue orders, but has begun to make a name for himself.

You should take a free hand in adjusting a hero's social status. If your campaign takes place in an urban blight, heroes might have very low status; if your heroes are to be the champions of a galaxy, adjust their social status accordingly.

INCOME & FINANCES

Should you keep track of how much money a hero has? People in the everyday world have to balance their checkbooks and mind their expenses, but it's not particularly exciting for heroes to be constrained by such mundane concerns. Here are several ways that you can address this issue in your campaign.

Money Doesn't Matter

After players select equipment for their beginning heroes, throw finances out the window. If the heroes need a specific piece of gear, assume that it's provided by their employer, sponsor, or parent organization. When an agency assigns a mission to a hero, the tools to get the job done are included.

If the heroes want to make use of



Who's broken-hearted now?

specialized equipment or big-ticket items, you might have them attempt contact or allegiance rolls in order to get their hands on the gear. Since they are supported completely by their parent organization, they're also obligated to undertake the missions they're assigned.

In the Ballpark

A hero's wealth level represents the amount of money the hero makes each month plying a primary trade. It may be a salary or the sum of commissions, bounties, negotiated contracts, research grants, interest, or dividends on investments.

Assume that the hero has liabilities proportionate to his income; 75% of his monthly salary goes toward upkeep. The other 25% is disposable income.

Since this method involves estimation, don't worry about calculating loans, interest rates, credit cards, or any other headaches of modern financial systems. If a hero wants something, he can save up to buy it. After all, heroes tend to confiscate equipment from bad guys, so they accumulate assets faster than average folks do.

If heroes accumulate money too quickly, you can rule that participating in prolonged adventures hurts their income. If a hero's principal source of income is carrying cargo and passengers on a system freighter and he spends weeks flying the other heroes around on various adventures, he won't earn an income that month.

Heroes Pay the Rent

The most realistic and involved option is to keep close track of the heroes' expenses. Heroes at the low end of the income scale may be motivated to undertake adventures just to stay out of debt. The tables below provide rough guidelines for some of the expenses a hero might face:

Housing and Utilities

Squalid	\$100
Poor	\$250
Tolerable	\$500
Average	\$1,000
Good	\$2,000
Excellent	\$5,000
Posh	\$10,000
Magnificent	\$25,000+

Lifestyle

Miserly	0.5 × Housing
Average	1 × Housing
Comfortable	1.5 × Housing
Luxurious	2 × Housing
Exotic	5 × Housing
Absurd	10 × Housing

Payments and Maintenance

Payments	5% of value
Maintenance	1% of value

Housing and Utilities covers the basic necessities of putting a roof over the hero's head. *Lifestyle* covers groceries, clothing, entertainment, housekeeping, and anything else the hero needs to get along. *Payments and Maintenance* refers to the cost of any items the hero owns that are worth more than a month's salary. For example, a hero with a \$20,000 used skycar must pay \$1,200 per month on payments, insurance, and maintenance.

Heroes can do anything with their finances that they like. But remember, heroic fiction isn't about going to work at a 9-to-5 job, paying the mortgage, and buying a new car now and then. It's about heroes doing things that ordinary people don't do.



CHAPTER 8

ACHIEVEMENTS

One of your most important roles is to supervise the development of heroes. As players become attached to the characters they create, they derive enjoyment from watching their heroes grow and change with successful adventures. As Gamemaster, you should take pleasure in your heroes' progress. Achievement level is the best measure of how much a hero has learned. It also represents an increase in his capabilities as he acquires new skills, refines old ones, and becomes a more well-rounded character.

ACHIEVEMENT POINTS

The number of achievement points you award to heroes—and the time when you award them—is under your control. It's up to you to decide just how quickly heroes will advance in your campaign.

If you give out too few achievement points, heroes will advance too slowly, and some players may become bored. If you give out too many, heroes will quickly become high-level heavyweights without much of a story to justify their ascent in power. When the game is too hard or too easy, the players become dissatisfied. Here are some guidelines for what's appropriate:

► 4 to 3 achievement points per adventure is fair as an award for each hero in the group; if the adventure is long or especially dramatic, award 1 point per two or three game sessions.

► Award an individual bonus of 1 point if a player depicts his hero's motivation, moral attitude, and character traits particularly well.

► Award an individual bonus of 1 point if a hero did something truly spectacular, noble, self-sacrificing, or heroic.

For example, if your group plays a game session once or twice a week, and an adventure takes four sessions to complete, you would hand out 4 to 6 achievement points per month of continuing play. Naturally, if you roleplay more often, your heroes will rise more quickly.

Gaining Levels

The reward for accumulating achievement points is an increase in level. When a player completes his hero's achievement track, he exchanges achievement points for an equal number of skill points. The skill points can be used to improve existing skills, purchase new skills, purchase last resort points, purchase an achievement benefit, or purchase a rank benefit, or they can be stored for later.

While you are free to award achievement points at any time during an adventure or game session, you should wait until an adventure is completed before allowing a hero to gain a level. A hero learning new skills or improving old ones needs training or study time. Of course, if the hero spends a lot of time in an extended interlude of travel or some other long period of waiting, you can decide that the hero's free time is sufficient to allow advancement.

In addition to learning new skills and increasing skill ranks, heroes may also be able to acquire achievement benefits. These are special bonuses, perks, or abilities keyed to the hero's achievement level. For example, a Combat Spec who reaches 3rd level may choose to use his skill points to improve his Strength score. If the same Combat Spec wants to improve his Intelligence score, he must wait until he has achieved 6th level. See TABLE P29: ACHIEVEMENT BENEFITS on page 127 of the *Player's Handbook* for a selection of achievement benefits that are available to heroes.

AWARDS & PENALTIES

Should you ever strip experience, powers, or benefits from a hero? In general, the answer is no. If you feel the need to penalize a player, the penalty of choice should be a lack of new experience or awards, and not a removal of benefits that have already been awarded.

Withholding awards is a powerful tool. It sends a clear message that you think that the player screwed up in the adventure. Naturally, you shouldn't use this casually or spitefully. Here are some cases in which you might be justified to withhold achievement points:

► The hero committed violations of stated aims, morals, or traits.

► The hero—or heroes—failed to complete the adventure due to lack of motivation, internal bickering, or by insisting on sticking with a tactic that you've told the player or players will never work.

► The hero—or heroes—completed the adventure or resolved a situation by using unfair or overwhelming force, or by allowing supporting characters to take all the risks and do the job for them.

► The player insisted on following a course of action that ruined the adventure for everyone else.

► The player derailed the adventure by being rude, critical, or abusive to the other players.

Obviously, this is a subjective measurement. You shouldn't further penalize a player who was victim-



Reflected tech

ized by bad dice rolls. Players with good ideas that don't work out shouldn't be penalized either . . . just as players with bad ideas that do work out shouldn't be encouraged to repeat reprehensible actions.

In addition to withholding experience, you can apply a few other awards and penalties when the circumstances warrant. Save these measures for extreme examples of good or bad roleplaying.

Skill Rank Increase

An increase in a skill rank is a significant reward, especially at higher skill levels, so use it sparingly.

For example, you might decide that a hero's Computer Science—hacking skill should be raised from rank 3 to rank 4 because of a brilliant and innovative feat of computer use conceived by a player. The player must roleplay the situation by describing exactly what his hero is trying to do. Finally, the skill check should be a critical point in the story.

Never grant an increase of more than one rank, and think carefully before you give a free rank more than once for any particular skill. At higher ranks, a skill rank increase may equal or even exceed the value of attaining a new achievement level.

New Skill

Sometimes, a hero tries to use a skill he doesn't know anything about and succeeds despite his ignorance. If you think the hero clearly demonstrates a knowledge of the topic, or works through a tough situation that could teach him something about the skill, you can tell the player to note a new broad or specialty skill on his hero record sheet.

Just like a skill rank increase, this should be a rare reward. Once or twice in the career of a hero is sufficient. Learning new skills is an important part of the normal achievement system, so don't hand out free skills unless a player impresses you.

Rank Benefit

A hero who purchases a rank benefit ahead of time (see page 63 in Chapter 4: Skills in the *Player's Handbook*) becomes capable of some advanced ability involving a specialty skill, despite the fact that the hero hasn't achieved the skill rank at which this benefit would normally be obtained. You can consider rewarding a hero by granting him or her a rank benefit, perhaps in a case when the hero has recently used a particular specialty skill frequently and successfully. However, it's not a good idea to hand out a rank benefit that is supposed to be earned by achieving the required rank. (Such benefits are marked with a "⊗" symbol in Chapter 4 of the *Player's Handbook*.)

Last Resort Points

Spending and purchasing last resort points can grow expensive, but you can award deserving characters with a last resort point on occasion. One of the best times to hand out a last resort point is after an adventure in which heroes demonstrated the best examples of roleplaying and heroism, and were forced to spend one or more points to succeed.

Awarding Perks and Removing Flaws

You can reward spectacular effort or unforgettable roleplaying with new perks. For example, a hero who survives a long battle filled with moments of courage, sacrifice, and persistence could be given the Tough as Nails perk. A hero who risks his life for another out of goodwill and kindness may gain a new Powerful Ally.

Or, you can give a special reward to a character by removing a flaw. The Spineless hero who displays a moment of crystallizing valor—and chimerical roleplaying—might find his cowardice suddenly a thing of the past.

These rewards should be rare in the extreme, occurring perhaps once in a hero's career.

Removing Perks and Awarding Flaws

Perks and flaws can serve to punish poor play. A hero with the Filthy Rich perk might lose it as his accounts are frozen in response to illegal trading. A hero may lose his Celebrity perk if he commits a crime that becomes public knowledge. In fact, you might reverse Reputation or Celebrity into Infamy. Well-known people who engage in scandalous behavior become the favorite whipping boys of the press.

Loss of Achievement Points

It's within your power to strip a hero of any or all achievement points he has earned since making his last level. Clearly, this punishment is grave and should be reserved for the worst cases of player thoughtlessness. Take the player aside and try to find out what the problem is; maybe you can work out a change in the character concept or history to explain the hero's actions, or somehow find a way to turn this into a positive step for your campaign.

Story Developments

One of the best ways to get players to consider the consequences of their heroes' actions is to allow the story to develop naturally from their choices. If the heroes kill hostages to get at the bad guys, someone who cared about those hostages might track down the heroes. Or imagine the

Monetary Award

Heroes can purchase a monetary award as an achievement benefit. The monetary award is a sum of cash or liquid assets that the hero receives, usually as a grant, bounty, or bonus.

The exact amount that the achievement benefit provides is up to you. The particulars of your campaign may demand especially large or small awards. A guideline might be to award \$50,000 for the first time a monetary award is purchased, doubled each time it's bought thereafter. You could also rule that after the first reward, each additional reward costs more skill points as it gives more money.

players' chagrin if their heroes are sued by a corporation for destroying the alien-infested mining station instead of cleaning out the creatures.

On the other hand, heroes who consistently display valor, sacrifice, and thoughtfulness can find their reward not merely through some game-based award such as a skill or a perk. Instead, such heroes may gain permanent recognition and a place of honor in your campaign.

Status, Money, and Rank

As the judge of your campaign, you have the right to change anything recorded on a hero sheet. A hero who captures a desperado may be entitled to collect a bounty; this money can be used to improve the hero's personal equipment. Patents, claims, salvage fees, research grants, stock options, and other such financial rewards might be bestowed upon a hero by a grateful supporting character. A hero who turns over an alien artifact to his government might be entitled to royalties on all devices made with technology derived from the find.

Social status and military rank rise through success. Promotion, fame, and new friends among the wealthy and powerful are symbols of a rise in status. It never hurts to be recognized as the fellow who saved the station from explosive decompression. If you choose to give a status increase as an achievement award, a hero's social level shouldn't rise more than one step at a time unless he comes into fantastic wealth or fame. See "Social Status" in Chapter 7: Attributes.

Loss of Money, Rank, or Status

Heroes who take irresponsible or destructive actions should suffer personal loss. Characters who belong to a particular organization—military officers, agents, or administrators—might lose rank or social status if they're caught violating the organization's policies. In some cases, a hero might even be discharged from service, brought up on criminal charges, or relieved of his position.

Taking equipment away from a hero can be a story development. Of course, a hero might not go along with handing over his possessions, but that would make him a criminal, with further story developments.

ADVANCED HEROES

Running high-level heroes can be a challenge for the Gamemaster and the players. Your job is to create new means and methods to test the players and keep the game interesting. Powerful, renowned heroes might take active roles in the major events of the campaign, getting involved in politics, diplomacy, and big business. If the players have applied themselves to advancing their heroes over many adventures, those heroes can be rewarded with more important roles in the campaign.

On occasion, a new hero joins a group of experienced veterans. A player might have had an old hero killed off, or you might decide to expand your gaming group. You can allow these newcomer heroes to start at level 3, level 5, or even higher in order to keep the party relatively balanced. See "Advanced Heroes" in Chapter 2: Hero Creation. In most cases, the new hero shouldn't start at a higher level than the lowest-level hero in the party.

RETIREMENT

The final aspect of heroic advancement and growth is the question of retirement. When is the challenge gone from a hero's career? Has he won every award and laurel that's worth winning? It's up to you to determine the upper limit of character level—both personal and social. The ceiling may be as low as level 6 or level 8 for low-powered campaigns or as high as level 20 or greater in epic space sagas.

In books or movies, characters retire when their story's over. You can use retirement as a motivation to take your campaign in a new direction. When the heroes conquer their great nemesis or accomplish their final mission, you can decide that the story's over and their time in the limelight is done.

It's better to retire your favorite heroes gracefully instead of serializing the story until the originality and the thrill are gone. If the only thing that seems worthy of the heroes' attention is one galactic catastrophe after another, it's time to think about winding up the storyline and starting with novice heroes again. Everyone en-

joys defeating the first alien armada—but how about the second, the third, or the tenth? Even the most enthusiastic players will grow tired of saving the galaxy over and over.

Beginning anew with fresh characters and localized problems is a great way to revitalize a game, giving players a chance to try out new hero concepts and see a different part of your campaign universe.

Don't spring retirement on your players. Tell them you're ready to see a new batch of heroes, and give them a chance to wind up the business their heroes are involved in.

If necessary, you can offer to soften the sting of retiring a hero by asking a player to come up with a relationship or connection between his old hero and his new one. Maybe a new hero is the child of an old one, or a distant descendant. Perhaps an alien artifact owned by the previous hero finds its way into the hands of the novice, a connection to grand old tales of former glory. You might have the old heroes appear in cameo roles as advisers, mentors, or movers and shakers in the campaign. Since they were last seen, the old Free Agent has accepted the position of intelligence chief for the sector, and the Diplomat of the party is now a planetary governor. Players deserve to see their favorite characters rewarded for heroism and success.

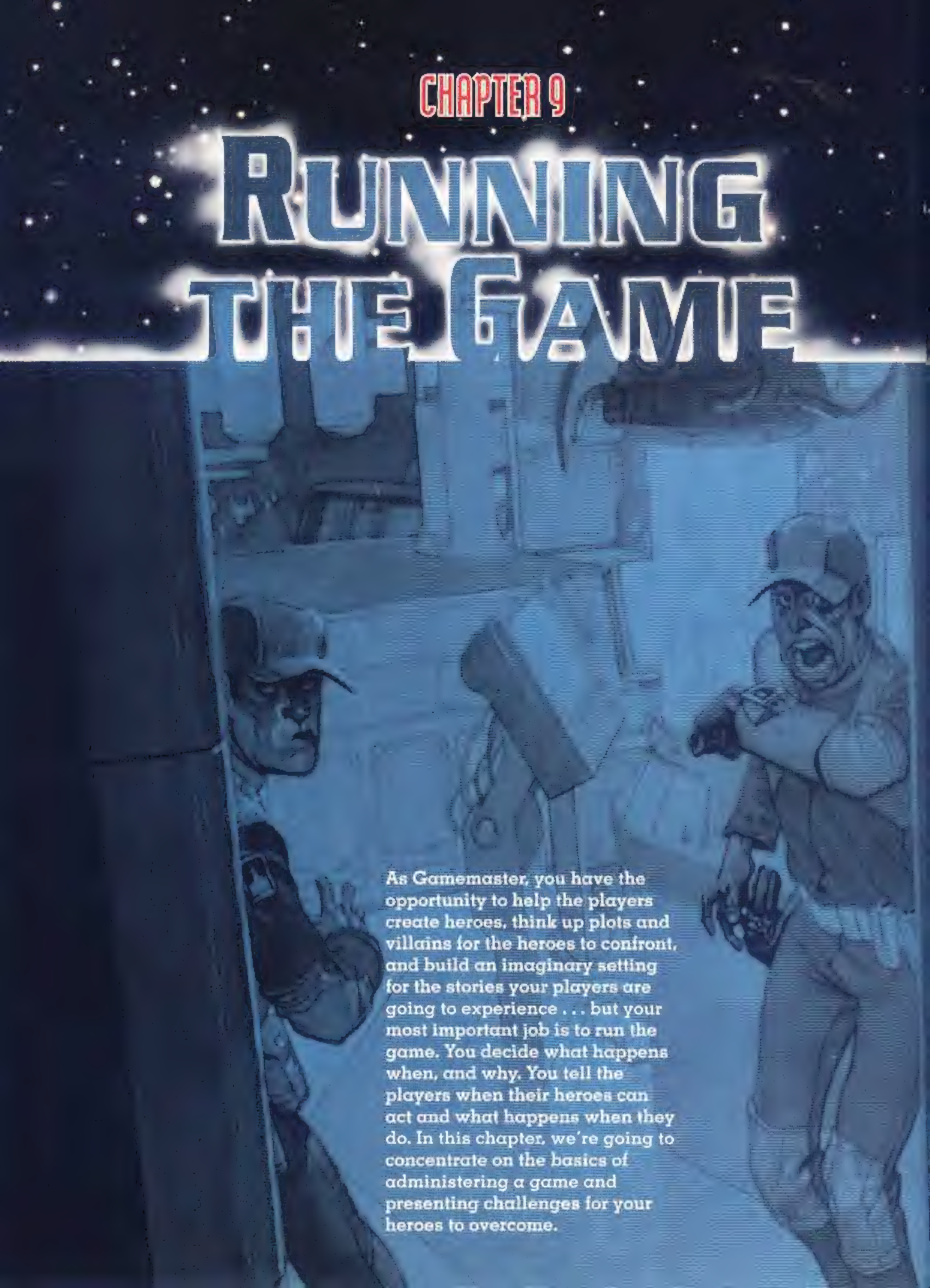
It's Your Game

It's perfectly reasonable to play the *ALTERNITY* game and use most of its rules for achievements without using the idea of levels. Some players and Gamemasters prefer a system that doesn't use levels. Maybe they dislike the competition that level advancement can produce, or they think that heroes should be able to profit from their experiences instead of waiting for an arbitrary amount of achievement points.

If you choose to do without a level system, simply allow your players to spend their heroes' achievement points immediately after you hand them out. Of course, it may still be necessary for heroes to save up to purchase high ranks of skills or special achievement benefits.

CHAPTER 9

RUNNING THE GAME



As Gamemaster, you have the opportunity to help the players create heroes, think up plots and villains for the heroes to confront, and build an imaginary setting for the stories your players are going to experience . . . but your most important job is to run the game. You decide what happens when, and why. You tell the players when their heroes can act and what happens when they do. In this chapter, we're going to concentrate on the basics of administering a game and presenting challenges for your heroes to overcome.

THE ART OF BEING A GAMEMASTER

Roleplaying involves imagination, player interaction, and group storytelling. Players don't simply interact with rules and the limited situations they define. They create. And the biggest difference between other roleplaying exercises and roleplaying games—and the greatest strength of roleplaying games—is the presence of a moderator, called a Gamemaster in the *ALTERINITY* game. Guide, referee, umpire, set designer, special effects technician, narrator, ally, opponent—the Gamemaster is all of these and more in a typical roleplaying game session.

What Does a Gamemaster Do?

First, an admonition. The Gamemaster isn't competing against the players. Unlike in other games, roleplaying games don't have winners and losers. When the Gamemaster and players come together to tell an exciting and fun group story, everybody wins. The best game sessions are remembered for years to come.

If a roleplaying game were a movie, the players' heroes would be the stars—the main characters of the story. The Gamemaster, then, is producer, director, screenwriter, set designer, and the actor portraying all of the supporting cast and major villains. With interest and vision, being a Gamemaster can be rewarding, challenging, and a lot of fun.

The Gamemaster's Other Hat: Moderator

As moderator, the Gamemaster must interpret the rules in a fair, honest, and impartial manner. Of course, a good understanding of the rules is necessary. Set forth for your players which options and any changes you want to incorporate into play. When a situation arises that isn't covered by the rules, come up with a solution. Don't be afraid to ask your players for suggestions, but keep in mind that your decision is final. The adventure must go on, so it's your job to make a ruling and get back to the action of play.

Before a Game Session

A game session is one distinct period of game play. It might take place on a Saturday afternoon, a Tuesday evening, or over an entire weekend. You may complete an entire adventure in one session, or the same adventure might continue over a number of nights of play.

Like the director of a theatrical play, you have a few things to do before the lights go up on the game session. The first thing, after becoming familiar with the rules in the *Player's Handbook* and this book, is to decide what kind of science fiction setting you're going to run. Will it be a published setting? Or will you emulate your favorite SF novel, movie, or TV show? Or will you put together a campaign world of your own imagining? Most Gamemasters use a combination of these to construct a setting. Refer to *Chapter 13: Cam-*

paign Design for more ideas. The type of setting you build affects the kind of heroes your players create, the tone of adventures you run, and the style of play.

Prepare, Prepare, Prepare

You need an adventure or a story idea before you gather your players. Although some Gamemasters can improvise, most need at least a collection of notes to work from. If you're using a published adventure, you need to read through it before the game session begins, making any alterations you deem necessary so that it conforms to your setting and style of play.

When writing your own adventures, you'll need to put together the adventure triggers, notes on supporting cast characters, details on locations the heroes might visit, and possibly an outline of the basic story you have in mind.

Remember, no matter how complete or extensive an outline you develop, a significant portion of the story isn't in your hands. Roleplaying is group storytelling, and a lot of how the adventure unfolds depends on the actions and ideas of the players and their heroes. With this in mind, prepare accordingly, leaving room for the players to develop certain details through the course of play. You won't be able to predict everything that will happen—and that's part of the fun. See *Chapter 15: Adventure Design* for an overview of how to plan an adventure, and how to create the parts of an adventure that you do have control over.

The Game Session

In the first game session that starts off your campaign, you need to establish a few parameters. You need to brief your players about the world your game is set in and how their heroes fit into this world.

Start by having the players introduce their heroes. The best way for them to do this is in character, but don't let the players forget to describe what their heroes look like—what they're wearing, the impression of how they move, the way they carry themselves; all these things can be used to paint a visual picture of the heroes.

In addition, you need to work out the connections between the heroes. Do some or all of them know each other before the first adventure, or do they meet in the opening scene? Are they part of the same team, or a group of individuals brought together by circumstance? You can establish connections between the heroes before the adventure begins, or just let the connections develop naturally during the initial adventure.

More information on what goes into an adventure is covered in Chapter 15. The rest of this chapter gives you advice on how to become the best Gamemaster you can be.

Create a Picture

In a roleplaying game, the action scrolls across the mind's eye of the players. Anything you do to help players create an accurate picture of each scene makes the story more exciting and immediate.

When you describe a scene, don't tell the players just how it looks—tell them what they smell, hear, and, when appropriate, what they feel and taste. Describe everything from the heroes' point of view. If the heroes can't see what's behind a door, don't tell them what's back there. The descriptive words you use should show the players what their heroes can see and otherwise sense.

Never tell the players what their heroes are doing—that's up to the players. *Instead, show them the results of their actions.*

Don't give everything away, of course. Hold back enough information to get the players curious and thinking about questions of their own. Make the heroes active, working for subtle clues or hidden se-

crets. By only describing the most important details, you can force the players to draw their own conclusions or to pick up the cues you want them to. For example, examine this description:

The airlock iris opens. The emergency lighting provides only faint illumination and leaves behind more than a few shadows and dark corners. You can see that the crew compartment is a mess. Books, data disks, and a variety of tools float about the main cabin, as well as globules of crimson liquid that drift like clouds in a calm sky. A single glove from an e-suit hangs near the ceiling. The air is stale, with an indistinct, rotting smell that hovers on the edge of your senses. Three portals lead out of this cabin. Two are closed; the third one, to your right, is partially open, though the passage beyond is dark. A barely perceptible clang sounds from behind one of the closed doors.

There's more than enough information provided in this description to spur the heroes to action, but nothing they couldn't spot was mentioned. The Gamemaster has given them things to think about and a variety of options to choose from when they make their first move. The players may come up with something unexpected, but chances are they'll decide to examine one of the clues.

Roleplay, Roleplay, Roleplay!

While every player controls one hero, the Gamemaster handles the entire supporting cast. That means everyone from the nameless extras and bit characters that fill out every campaign to the prominent allies, sidekicks, adversaries, and major opponents that the heroes interact with. Most members of the supporting cast need to be described only by *a key word or a single detail that helps you play a role.* Some can even be improvised on the spot, especially when the heroes go someplace you haven't developed.

A clerk in a store, a taxicab driver, a minor bureaucrat, or a man in the street might have to be made up on

the spot in response to a hero's actions. Don't worry about game statistics or Ability Scores for these types of characters. In most cases, no dice rolls will be required when interacting with them. If a dice roll is needed, look in *Chapter 6: Supporting Cast* for statistics of some general types of supporting character templates, or simply make up whatever numbers you need. In the event that heroes decide to try their Personality skills on these minor cast members, most start out as Neutral to the heroes, unless you decide otherwise.

On the other hand, important members of the supporting cast require more complete backgrounds, roleplaying notes, and full or partial sets of game statistics. Build these characters according to the role you think they're going to play in the story. An expert or specialist needs enough statistics to apply his knowledge for the heroes, while thugs and minor villains require enough skills and equipment to put up a fight. If these supporting characters survive to become recurring members of the cast, you can always add to their statistics and background details later.

Major members of the supporting cast deserve to be treated like heroes. They need Ability Scores, skills, equipment, goals, personality tags, and even attitudes toward the heroes. Adversaries of this caliber need to be played logically, consistently, and with panache.

Whether a supporting cast member is a walk-on, a minor character, or a star-level adversary, play each as an individual. Roleplay! Nothing makes a minor character shine like good roleplaying of a key feature, and nothing ruins a major character like not roleplaying him to the hilt. Ham it up! Act it out! Make each character memorable for the role he or she plays in a scene.

It's important to keep a separation between you as Gamemaster and you as the person who represents the supporting cast. The characters you run shouldn't know everything you know, and you shouldn't make them into heroes that steal that stage from the players. *Be fair, and play each character for the specific role you envision for him or her.* If the heroes have set a perfect ambush, then let the villain walk into it. If the heroes make a good bluff, let them fool the border guard.

Running a Game Session

The preparations are made: You know the basics of your plot, you have notes on key scenes and the supporting cast. Now, the epic begins.

Your job starts with the adventure trigger—the opening scene that sets the mood and tone of the adventure to come, and gets the action moving.

After that, the players should be able to use the momentum of the trigger scene to let the story unfold through the actions of their heroes. You need to listen to what the heroes are doing, decide when to use the rules to control activity and when to let roleplaying accomplish things, and decide when to spring new scenes on the players that will spur more activity.

Consider the way a pinball machine works. The machine has all kinds of challenges, encounters, and combat scenes laid out in interesting combinations. You pull the adventure trigger and set the pinball—the story—in motion. As it spins through the course of the adventure, the heroes direct it in any number of fun and interesting ways. At times, however, the pinball might need a boost to get to the next level. That's when you tap the pinball in a new direction—a new scene—to get it rolling.

The trick for the Gamemaster is to keep that pinball always in motion. Keep the action fast and furious, and keep the story moving.

Both techniques get the job done. Work with the voice you're most comfortable with. Using first-person or second-person voice allows for a deeper connection between player and character, and brings out more drama in the moment. But if you're uncomfortable with the theatrics of roleplaying, just sum up the information and let the players get to the part of the game that matters for you and them—combat, challenges, and puzzle-solving.

Set the Right Mood

Every setting has a specific mood, depending on what genre of science fiction it seeks to emulate. Establishing that mood can help the players maintain their characterizations and visualize the scenes described to them. Some adventures can change the tone and mood of the setting for a brief time—think of your favorite television dramas that sometimes use comedy to create a change of pace—but in general you should keep the mood constant so the players stay immersed in the story.

The way you describe scenes, play supporting cast members, and make information available to the players reinforces the mood of your setting. If your campaign is an epic space opera, then your descriptions should be larger than life, your supporting characters good or evil, and your presentation straightforward.

If your campaign instead tells a dark and gritty tale of the near future, then your descriptions need to convey that attitude with an oppressive air that infects the heroes. Your supporting cast members need to be hard, tough, and fatalistic, and the information you present should be full of twists and turns to foster a mood of isolation and unease.

Moderating the Story

You're the moderator, and your word is law. You decide which optional rules are in play, and you settle any questions concerning "the reality" of your setting.

Of course, you need to be fair and impartial; otherwise, your players could wind up angry and frustrated. Reasonable players won't mind if you make rulings that don't favor their heroes, as long as you act consistently and in an objective manner.

Action vs. Style

Every Gamemaster has his or her own style. Some people play the game by the book, relying on the rules and guidelines of the system to figure out what happens next. Others don't open any books during the whole session of play, figuring that it's not worth interrupting the story to find out the wording of the rules. You'll have to learn from experience which style works best for you.

Most Gamemasters interact with the players in second-person voice while narrating the details of a scene, referring to the hero and player as "you." The player responds in first-person voice, identifying his hero as "I." Here's an example of second-person and first-person voice:

Gamemaster: "You see a long corridor, with a lot of heavy damage. There are broken power conduits, shattered decking, scorch marks on the walls and ceiling, and debris scattered on the floor. What are you going to do?"

Player: "I ready my mass pistol and sneak down the hallway, keeping my eyes peeled."

For a different flavor, the Gamemaster and the player can use third person, and the scene will seem more detached. Sometimes third-person voice is useful for that reason:

Gamemaster: "This is a long corridor, with a lot of heavy damage. There are broken power conduits, shattered decking, scorch marks on the walls and ceiling, and debris on floor. What's Sergeant Grimes going to do?"

Player: "Grimes draws his mass pistol and advances down the hallway. He's looking out for trouble."

There isn't a great deal of difference in game styles for narrative scenes like this one. Some players are uncomfortable with trying to speak in their character's voice—they'd rather stay a little detached from the roleplaying by referring to their heroes in the third person.

You often have to portray a villain or a supporting character the heroes are interacting with. You can actually speak your supporting character's lines and let the players sort things out for themselves, or you can simply sum up what the supporting character has to say:

Gamemaster (as informant): "I heard that there's something going on down at the docks tonight. Gared's expecting a shipment, and all his goons are going to be there."

Or...

Gamemaster: "Your informant tells you that Gared's expecting a shipment down on the docks tonight. A lot of his men are going to be there."

Apply the same standards to the supporting cast.

Remember, you're in control of the campaign and the game. Provide a challenge so that a good story can be told, but don't view yourself as the players' opponent. And give the players a break every now and then. It's no fun for a player to have a favorite hero killed, especially in a manner that he had no control over. If a hero is taking unusual risks or acting in a manner that goes against self-preservation, then serious harm should follow. A hero who dices with death on a regular basis should meet the fate that's coming to him.

Relax!

It's a game! There aren't any tests, and no one will hold it against you if you make a mistake or two along the way. Learn the rules in stages, adding mechanics as you and your players need them.

Be entertaining, and allow the players to entertain you. Ham it up, play it straight, go for the dramatic—whatever's appropriate for the scene, the setting, and the story you've set out to tell.

You and the players have come together to tell a group story, using the language and conventions of a roleplaying game. Use the rules as you see fit, but use them to help you tell the story—not to hinder the way the story unfolds.

Keep Things Moving!

Gamemasters should feel free to use any of the following methods for keeping the action going, the story flowing, and the game fun.

- **Make It Up:** Improvisation is one

of the most important skills a Game-master can learn. No matter how carefully you plan or how completely you outline, the heroes will wander from your "schedule." They'll go someplace you hadn't even considered to talk to someone you hadn't even thought of. What happens next? That depends on what you make up.

Begin by describing a few details about the new location and who's there. Use the reactions of the players to spur more ideas. What's behind your well-decorated and

well-planned sets might not be as finished and complete as what you had set up, but that's okay. Go with the flow until you can get the heroes back to a scene you've prepared. You may have to make slight adjustments, but chances are you can use what you've planned in some fashion, no matter how far afield the heroes wander.

- **Wing It:** When the adventure starts to take off, nobody wants to break out of the roleplaying by stopping to check the rules. That's the best time to simply wing it. Roll some dice and move on.

For example, if a hero wants to see if an enemy's weapon has any ammo left, have the hero make a Personality feat check to see how lucky he is. If the heroes ask if a specific item can be found in the room they're searching (but not an item connected to the main plot of the adventure), make a guess at the odds of the item being there and roll a die.

- **Ignore the Rules:** When you decide that a specific rule should be bent or ignored for the sake of the story, that's the way it is. Sometimes you'll use dice to settle a question, other times you'll let roleplaying and the needs of the story dictate how events unfold.

Tools of the Trade

Here are some methods for making your game sessions better:

- **Accept Feedback and Ideas:** Your players are a great resource for adventure ideas, especially when they tell you what they'd like to do. Also, ask them to tell you what they liked best about the last adventure. This is a great way to gauge what worked, what didn't, and what types of adventures your players are interested in.

- **Hints:** Know your heroes and the skills they possess. In this way, you can use their skills to drop hints, plant false clues, or otherwise direct the course of adventures. Watch for skills like Awareness, Investigate, and Precognition, as these allow you to pass along information.

- **Secrets:** Nothing gets the blood pumping like a good secret. Players will always wonder what you know that they don't, and you can use this uncertainty to your advantage. Roll dice out of sight to determine the results of certain supporting cast members' actions, and even to see how a hero fares every once in a while—especially when you don't want a player to know the exact result of an action. Pass notes to players when their heroes do something the rest of the group can't see, or even take players out of the room to pass along secret information. Sometimes you might want to do these things just to make the players *think* you have a secret—just to keep the sense of mystery strong.

- **Eyeballing:** Sometimes when the action is racing toward a fiery conclusion, you don't want to slow down to add up all the possible modifiers in a scene. This is a good time to simply use the Situation Die Steps Scale on page 48 in the *Player's Handbook*. Decide if an action is Formidable (+4 penalty) or Very Easy (-2 bonus), allow players to adjust for their heroes' skills, and get on with the die rolling.

When Your Heroes Split Up

Eventually, your heroes are going to come to a point in an adventure when the best option for them is to split up. "You guys go after the space pirates while we go to the lab to get this sample analyzed!" How do you handle this divergence?

Think about the way movies and novels handle multiple characters in multiple situations. The camera focuses on one group for a time, waits until they get to a particularly tense moment, then switches to see what the other group is doing. By leaving each group at a cliffhanger, you keep the tension and suspense high—and everybody wants to see what happens. Flip back and forth between the groups, spending about 15 minutes or so with each, until they eventually get back together.

Unless it's important to your adventure, don't worry about separating the players. Just remind them that their heroes don't know what the players know—at least not until the groups have gotten back together and had a chance to share notes. Good roleplayers can take it from there.



Mystic, martial artist, trader, and doctor

Ending a Session

Sometimes a game session will stop in the middle of an adventure. In such a case, bring it to a close with your players wanting more—on a cliffhanger. Will the heroes make it this time? Will the villain get away? Tune in next time. . . .

After the session in which the adventure comes to a conclusion, talk to your players. Find out what they liked, and why. Ask them where they think the campaign is headed. They might give you an idea or two that you can incorporate into the next adventure you design.

This is also a good time to ask the players about what their characters may be planning. Their answers will help you develop future sessions as well as respond to your players' goals.

Keeping Records

Being a Gamemaster means being in possession of—and in control of—a large body of information. Keeping this information organized and up to date is critically important to running action-filled game sessions—

your players aren't going to want to wait while you rummage through a stack of paper to find the map of the spaceport their heroes have just entered.

In addition to maintaining notes on the supporting cast and specific locations in your campaign setting, you need to keep track of events and actions that occur and could come into play again in future sessions. This sort of record-keeping is especially important for mysteries that slowly unravel, and for recurring plots and characters.

It's also a good idea for you to keep an up-to-date copy of each player's hero sheet. Having ready access to the heroes' skill scores, for instance, makes it possible for you to roll secret skill checks without having to tip your hand by asking a player what his hero's Awareness-intuition score is.

Campaign Calendar

Many Gamemasters enjoy developing a fictional calendar and a timeline for their setting. By putting the heroes into a setting that has a history, you may realize opportunities for adventure. The warlike empire was

defeated seven years ago? Maybe they're preparing a retaliatory strike. The comet will strike the planet's surface in three months? The heroes better invent a device to deflect the comet—soon!

Creating special dates and anniversaries for your campaign helps to foster a sense of realism. Why mark holidays? If you can tell your players that they've landed on Laxa IV on Liberation Day, your players will naturally fill in the surroundings with their own expectations of what it would be like.

Advance the calendar as you see fit. If the heroes have to wait three weeks for the next driveship to come by, then those three weeks pass: just tell the players, "It's three weeks later . . ." and mark the new date.

Events that commonly advance a campaign setting's calendar include:

- ▶ Traveling for longer than one day
- ▶ Periods of research, analysis, preparation, or training on the heroes' part
- ▶ Incarceration or legal troubles
- ▶ Special story events or character developments

SCENE STRUCTURE

A scene can be anything from a tense negotiation in a conference room to a battle of dreadnoughts hurling energy at each other. While these examples might not seem to have much in common, all scenes have the same basic components. There's an opening, in which the heroes see what's happening; an opportunity for action, in which the heroes can affect the adventure; and a closing, which ends the scene.

Opening a Scene

A scene can begin in any way you can imagine, but at a minimum you need to tell the players where their heroes are, what they're doing, and what their surroundings are. Here's an example of an opening:

You kick open the door and see what appears to be a lab. In the room are long tables cluttered with scientific apparatus, a big computer console on the far wall, and a weird tank with something floating in a murky solution. A pair of guards are standing watch—and now they're whirling to face you and drawing guns.

The next thing the Gamemaster will say is "What do you do now?" Nothing has forced the heroes to choose one strategy over another; they can try to talk to the guards, retreat out of the room, or blast away.

Action

Action is the meat of the scene. Heroes and supporting cast members may interact with one another in any number of ways: in cooperation, opposition, or competition. The rules in the *Player's Handbook* and in this book for resolving actions cover most situations, but you make the game your own by improvising, expanding the action to meet your needs.

Once the scene has begun, anything goes. You've prepared for what the heroes are likely to do, but expect to be surprised by your players' imaginative responses to situations.

Closing a Scene

Sooner or later, every scene ends. The adventure moves on. Avoid scenes that run on for more than ten rounds of combat, require dozens of dice rolls, or embroil the heroes in conversations that never end. If you find that a scene is dragging on, don't be afraid to wrap things up.

Before you end a scene, give the players a chance to pursue their objective in the scene and witness the results: success, failure, or tie. The players need to know if they've got a lead to work with, if they can go on to the next step of the adventure, or if they're going to have to retrace their steps and try again.

The Interlude

Stringing together scenes requires attention and imagination on your part. Think of an adventure as an action movie. Not every moment of the heroes' existence is on film. There are sequences in which the heroes review their options, make preparations, travel, or wait for the right time to strike. These scenes-that-aren't-scenes are called *interludes*.

Some groups derive satisfaction from the roleplaying interaction between heroes, and interludes between scenes are excellent times for players to compare what they've observed and devise plans for completing the adventure. You might spend much of your time involved in these off-screen sequences while representing the supporting cast.

A few examples of interludes:

- ▶ A period of travel during which the heroes spend most of the time getting from one point to another
- ▶ A long challenge, such as an analysis of evidence, a scientific experiment, or a research project
- ▶ A rest period in the middle of an adventure
- ▶ A period of training, resupplying, or recovery away from the immediate threat

Interludes allow you to control the flow of time in the game. If it's important to the adventure for a couple of weeks to go by before the heroes get their next lead, use an interlude to account for the heroes' time and attention while you're setting the stage for the next scene of the adventure. If the heroes are busy for three months

rigging the experimental singularity probe, call it an interlude and skip over the intervening time.

During short interludes, don't worry about what every hero is doing. Anyone can maintain equipment, read, or socialize in the local cafe. Try to ensure that every hero has something to do during a long interlude, though; players get bored when they think their heroes are sitting around doing nothing!

CHALLENGES

A challenge scene is one in which a hero tests his skills or abilities in a contest—a cliff to be climbed, a bomb to be defused, or just about anything that doesn't involve combat or interaction.

Presented here are guidelines for creating and running physical and mental challenges. Often, your judgment is the deciding factor in determining how long a challenge takes, how difficult it is, and what the results are.

Each challenge you place in front of the heroes has at least one *challenge path*—the route by which a hero can overcome the challenge by using his skills or abilities. A challenge path is defined by its *complexity* (the number of successes required to complete it), its *time frame* (the rate at which heroes can attempt skill checks to overcome the challenge), and its *risk* (the consequence of failure).

Most challenges fall into one of five general categories: *reasoning*, *endurance*, *hazards and traps*, *obstacles*, and *technical challenges*.

Challenge Paths

Most challenges can be approached in more than one way. Heroes trying to defuse a bomb might disarm it, hack into its electronic brain, or jury-rig a robot to carry the bomb away. When you're preparing a challenge, take a moment to think up the likely responses and prepare a challenge path for each.

Some approaches may be more appropriate than others. Reflect this fact by assigning penalties or bonuses to certain courses of action. Rigging a robot in only a few minutes might be difficult, possibly a +2 or +3 penalty. On the other hand, the bomb might be easy to disarm, giving a -2



Combat between corvettes

bonus. Or it could be booby-trapped by a demolitions expert, giving a +4 or +5 penalty to disarm attempts.

Complexity

The complexity of a challenge is described by the number of successes a hero must obtain in order to complete the job. A simple challenge (attempting to jump a chasm) requires only a single skill check; trying to find the cure for an unknown illness might require dozens of successes.

Use the complex skill check mechanic for extended challenges. Refer to *Chapter 4: Skills* for more information on complex skill checks.

Time Frame

Time frame defines how often skill checks can be made to accumulate successes. During a slow-moving challenge—for example, conducting painstaking scientific research—a character might be allowed to make only one check per week. In comparison, a hero trying to jump a fence either succeeds or fails in a single phase of the action round.

When a hero is engaged in a long

challenge, work may not be continuous. For example, a prisoner digging his way out of his cell might work for just a couple of hours each night, but he's making progress. In this type of situation, a hero might be able to engage in several challenges at the same time.

See **TABLE G27: CHALLENGE TIME FRAME** for guidelines in determining the interval between individual parts of a complex skill check. For example, you might decide that a hero modifying a computer program

needs 12–48 hours (or thereabouts) to overcome that challenge. If you've decided that it takes 6 successes to finish the job, the hero makes a skill check every 6 hours until he gets 6 successes.

Risk

The danger caused by failure during a challenge depends on the nature of the challenge. Someone who fails to make it over a chasm with a running leap faces the prospect of a long and

TABLE G27: CHALLENGE TIME FRAME

Time Frame	Check Interval	Example
< 10 seconds	1/phase	Athletic feat
10–60 seconds	1/round	Picking a lock
1–10 minutes	1/minute	Setting a trap
10–60 minutes	1/10 min.	Temporary repairs
1–12 hours	1/hour	Climbing a large cliff
12–48 hours	1/6 hours	Permanent repairs
2–7 days	1/day	Minor construction
7–60 days	1/week	Extended journey

unpleasant fall, while a hero who botches the job of defusing a bomb could cause an explosion. Many challenges can inflict damage, and others may imperil a hero in other ways—the loss of possessions, the onset of a disease, or a complication in the story that results from his failure to complete the challenge.

Reasoning Challenges

When a hero must use wits or training to arrive at a conclusion, he faces a reasoning challenge. On occasion, a hero has knowledge that his or her player doesn't possess; for example, a starship commander knows more about astrogation and starship engineering in the context of the adventure than any player.

The Fact Check

A reasoning challenge can be played as a fact check. Think of this as a roll to see if the heroes happen to recall a portion of their specialized knowledge that applies to the situation. For example, if you tell the players that their heroes have encountered a spatial anomaly, you might allow each character to attempt a reasoning challenge using Physical Science—astronomy to gain a glimpse into what they're facing.

- Challenge Path: Any skill.
- Complexity: Simple (1 success).
- Time Frame: Instantaneous.

Quick Judgment

The second common use of a reasoning challenge involves making a snap judgment about a situation or transaction. In this type of challenge, a hero examines the evidence and information he can gather with his wits and senses, looking for things that don't fit. A detective making a cursory examination of a crime scene and an undercover officer evaluating a new contact are examples of heroes trying to make a quick judgment.

You can decide that 1 success produces a basic fact, and 4 successes produce insight into the problem at hand, but a hero needs 7 successes to discern a subtle clue. The more time and effort a hero spends on the challenge, the more likely it is that a secret will be found. In short, a hero can make a better judgment by stick-

ing around to examine the scene or grilling the prospective contact.

► Challenge Path: Skills commonly used in reasoning challenges include Business, Knowledge, Law, any Science, Administration, Interaction, and Investigation.

► Complexity: Simple or obvious problems require 1 success. Subtle or concealed information requires 3–5 successes. Extremely subtle information might require 6–8 successes.

► Time Frame: Minutes.

Endurance Challenges

Extended physical activity or a battle against the elements may be reflected by an endurance challenge. Endurance challenges involve the loss of stun or fatigue points.

Anytime a hero is faced with the threat of freezing, heat exhaustion, suffocation, drowning, or death by the forces of nature, have the player make a Stamina–endurance check for his character to see how long he can hold out. This is a special kind of challenge that comes into play when a hero is trying to hold up against something that can exhaust or kill him over time.

The two basic kinds of endurance challenges are exposure challenges, which cause stun damage; and exhaustion challenges, which cause fatigue damage. More information on running these challenges can be found in *Chapter 3: Gamemasters in Action*.

Overland Movement

Heroes who stroll, march, or force march for hours must make Stamina–endurance checks to avoid suffering fatigue damage; see “Movement” in Chapter 3.

Hostile Environments

Exposure to hostile conditions represents an endurance challenge, too. Depending on the exact conditions, a hero might have to check for stun or fatigue damage over the course of hours, minutes, rounds, or phases. See “The GRAPH System” in Chapter 3 for details.

Hazards & Traps

A trap is a challenge that attacks its victim—a poison needle in a handle,

a door that opens beneath a hero's feet, or a shaky ledge that gives way when the hero puts his weight on it.

The challenge path for a hazard or trap usually begins with a hero making a feat check or a skill check, which measures how negatively the trap affects him. Well-made traps may offer substantial penalties to the hero's skill check, and deadly ones may inflict serious damage on Ordinary or Good results.

After the trap activates, the hero may face additional steps in the challenge path. He may have to climb out of a pit, disarm the dart throwers, or recover what's left of his computer files before continuing.

Heavy Falling Things

Heroes at risk of being crushed by falling stones, toppling trees, or other large objects from above should get an Awareness check in order to spot the danger before it strikes. A penalty may be applied if the trap is well constructed. Once the trap is sprung, damage inflicted depends on the victim's Dexterity feat check. Compare the weight and speed of the object to a normal fall and use the damage for falling as a guide. See “Falling” in Chapter 3.

Obstacles

Some challenges just stand in the way and force the heroes to think about how to get around, over, or through them. A river that must be crossed, a cliff that must be scaled, and a cave-in that must be excavated all fall into this category.

An obstacle may have a lengthy challenge path requiring a number of successes. Unlike in an endurance challenge, successes against an obstacle measure progress over time. Although an obstacle is not innately dangerous, a hero who runs into trouble along the way can be hurt—consider a rock climber who rolls a Critical Failure halfway up a 100-meter cliff, or a swimmer who tires halfway across a river.

Obstacles offer the most possibilities for alternate challenge paths. For example, heroes confronted by a locked door have several options open to them—picking the lock, bashing the door down, or setting a charge to blast it open.



Bounty hunter, ambassador, law enforcer, and brawler

Doors & Security Devices

A locked door, electronic vault keypad, and similar types of controlled access can stop the heroes in their tracks. The most common skills for dealing with a challenge of this sort are Manipulation, Computer Science, and Security. Picking a lock or rewiring a keypad is a moderately complex task, and may require a greater number of successes for advanced locks. A time frame of rounds or minutes is appropriate, although extremely advanced security systems may take hours to crack.

Walls, Fences, & Cliffs

The challenge path for scaling a physical barrier is usually Athletics-climb, although heroes might think of other ways to get around or over the obstacle. The complexity and time frame of the challenge depend on the length of the climb.

When a hero fails a climb skill check, he doesn't automatically plummet to his death. Allow him a Dexterity feat check to catch himself on something, although he may require assistance to get out of the predicament.

Technical Challenges

A technical challenge involves using skills in working toward a specific goal—trying to hack into the enemy mainframe, repair a damaged star-drive, synthesize an antidote, or restore another character to health.

There's an astounding variety of ways in which heroes could meet a technical challenge. Refer to the guidelines for "Complexity" and "Time Frame" presented at the beginning of this section. The descriptions in *Chapter 4: Skills* may present some options for specific challenges.

Analysis & Research

Heroes digging up information by a thorough study of the facts at hand are engaged in this kind of challenge. Administration, Investigate, and Science skills prove the most useful during analysis or research challenges. You may assign a penalty to the skill checks to measure how hard it is to come up with a useful observation given the sources. The complexity reflects how many facts must be compiled in order to arrive at a conclusion. The time frame de-

pends on the amount of source material and the hero's means of access.

◆ **Example:** Ace reporter Scoops Doogan is looking through the city's property records to find out who owns the mysterious warehouse. Administration and Investigate are two reasonable skills to use. The Game-master decides that tracking down a normal record would require only 1 success, but the villains have set up a couple of layers of shadow ownership, so Doogan needs 3 successes to wade through it all. The records are crammed into paper files without any organization, so the Game-master decides that Scoops can try one skill check per hour.

◆ **Example:** Super physicist Andrei Varakov is investigating the site of a wrecked asteroid colony, looking for any evidence of odd physical phenomena. He uses a sensor device to take readings and then retires to the ship's lab to examine his findings, using his Physical Science skill. The Gamemaster decides to make this a difficult challenge, giving each of Varakov's checks a +2 penalty. Since Varakov needs to correlate and plot a number of readings, and then look through some high-

brow and radical theories, this task requires 6 successes. With the resources of the lab and the ship's computer, Varakov can make skill checks once per hour. Without them, he would make checks once per day.

Computers

Using the computer as an aid to research or investigation allows the hero to add the computer's bonus to his own skill check—which could be Investigate, Knowledge, or any Science. But a hero using the Computer Science skill to gain access to an enemy computer, craft a virus, or write a program is engaged in a specific kind of technical challenge.

When a hero is hacking into an enemy system, the computer's security program governs the challenge difficulty. Usually, the hacker must first bypass or defeat the security before doing what he came to do. Refer to the rules in the *Player's Handbook* for security complexity and difficulty.

Creating a program or repairing damage to a computer's software is more time-consuming. The quality of the program affects the hero's skill checks, and the length of the program governs the successes needed. It might only take a few minutes or hours to modify an existing program, but coding a major program should take weeks or months.

Is This Worth the Time?

Sometimes, players focus on insignificant characters that appear in a story and try to drain them of everything they know. This can put you in a bind, because you have no idea what the clerk at the shoe store knows or doesn't know about the recent disappearances or the local crime lord. When the players get distracted by minor supporting characters and extras who don't have anything to do with the story, you'll need to find a way to get them on track.

Have fun introducing the characters to an eccentric personality or likeable characters. But don't be afraid to say, "This guy doesn't know anything." Most players take that as a sign that the conversation isn't worth the time.

Medical

Using medical skills to treat an injured character is a technical challenge. Medical treatment is covered in Chapter 3: *Gamemasters in Action* and Chapter 4: *Skills*.

Repairs

A hero might try to fix anything from an engine with a thrown rod to a defective stardrive. The quality of the tools and resources available modifies the challenge difficulty—it's easier to fix a bent axle in a body shop than out in the middle of nowhere. The extent of the damage is reflected by the complexity of the challenge—correcting a minor problem may only require 1 success, but fixing a big problem could require 8 successes.

Repair times can vary, depending on the availability of spare parts, the accessibility of the damaged area, and whether or not any machining, manufacturing, or programming is necessary to get everything back online. Generally, the type of damage governs the time frame of the repairs. Repairing stun damage takes minutes or hours, but fixing mortal damage takes days or weeks.

ENCOUNTERS

Heroes might be able to shoot their way out of trouble or invent nifty devices to circumvent their enemies, but sooner or later they'll need to interact with the world around them. An encounter can involve speaking, dealing, or persuading: an interrogation, a business transaction, an emotional appeal, or a veiled threat. Encounters are sources of information, assistance, and entertainment for the heroes and their players.

Encounters are the dialogue of an adventure. They help you to deliver crucial materials, support, or knowledge to the players. Roleplaying is the best chance for the players to showcase their heroes. Some challenging adventures consist of nothing but encounters, as the heroes puzzle out a mystery, arrange an alliance, or make contact with a hard-to-reach person.

The encounter rules presented here and in the *Player's Handbook* are tools for your use. An encounter table (Table P25) is provided not to deprive anyone of the pleasure of roleplaying, but to give you a method of approximating the response of

the supporting cast when you're not sure how they react to the heroes. As always, feel free to ignore the results of any table and roleplay characters and situations as you desire.

Encounter Paths

As with a challenge, you can consider an encounter to have certain defining characteristics. The path is your plan for the encounter. Consider which skills the heroes are likely to use in dealing with this character or situation, and decide how these different tactics are likely to work.

Of course, you don't really know what a hero's going to say or do before he does it, but you can make some guesses. It's reasonable to expect that a Combat Spec might try to intimidate a smart-mouthed punk, while a Free Agent might try to get him to open up to negotiations, and the gorgeous Diplomat could flirt with the street rat and overpower him with her presence. Knowing your players and the way they like to portray their heroes is an advantage in planning an encounter.

Based on what you expect the heroes to do or say to secure the supporting character's cooperation, you can set up several possible encounter paths and outcomes. A guard might just stand aside if bribed or intimidated, but if the heroes charm or deceive him, he could volunteer critical information or even accompany the party to help them along.

Difficulty

In addition to providing information or cooperation, some tactics may be easier or harder to apply than others. This is reflected by the *difficulty* of an encounter challenge. The basic measure of encounter difficulty is the prospective target's resistance modifier—his force of Will or the level of his Intelligence. Refer to TABLE P10: *SKILLS & RESISTANCE MODIFIERS* on page 35. Assign additional modifiers based on the situation.

◆ **Example:** An extremely strong-willed guard (resistance modifier of +2 steps) might be hard to intimidate or charm, but he could be unusually greedy and susceptible to bribery, granting a hero a -1 bonus to the use of this skill. The skill check is made with a +1 penalty.

Preparing for an encounter by studying the target and learning

how to push his buttons is a smart precaution, and might provide the hero with an edge in negotiations.

Resolution

A single skill check is all that's necessary to resolve most encounter challenges. Compare the target character's attitude toward the hero with the result of the hero's skill check, and consult TABLE P25: ENCOUNTER SKILL EFFECTS on page 96 in the *Player's Handbook*. It's important to remember that Hostile characters aren't always enemies. For example, a negotiator sitting across the table from a hero might be regarded as Hostile, since he's trying to get the most out of a deal while paying the least amount possible.

Use your judgment when roleplaying supporting cast members during encounters. Apply penalties to encounter skills as you feel appropriate; in any event, you can set aside the result of any dice roll.

Time

Most encounters take less than ten minutes. Either the hero manages to pass the bribe, charm the object of his affection, or lie to get out of trouble—or he doesn't. Think of an encounter as one scene in a movie; even extensive dialogue doesn't go on for much longer than ten minutes or so. Some encounter scenes may take even less time; bluffing or intimidating someone may be accomplished with one strongly worded statement and a steely glare.

One-liners take no longer than a single phase. *Deception-bluff* and *Interaction-intimidate* are encounter skills that can be pulled off as one-liners.

Brief speeches require anywhere from a round to about a minute to achieve results. *Leadership-inspire* and *Interaction-taunt* can be used for brief speeches.

Simple transactions take from one to five minutes to complete. Encounters using *Business*, *Administration*, *Street Smart*, or *Interaction-bargain* fall into this category. Some important transactions and negotiations, such as corporate acquisitions, can drag on for weeks or months.

Conversations last anywhere from a few minutes to a few hours. The use of *Culture*, *Entertainment*, *Interaction-seduce* or *Investigate-interro-*

gate generally takes a fair amount of time to sway a supporting character or complete the objective of the encounter challenge.

It's not important to keep track of just how long an encounter takes. Keep the scene going for as long as the players want—if they're still asking questions or discussing the situation in character, there's no need to step in and end the encounter until the players and the supporting characters have nothing more to say to each other.

Extended Encounters

The average encounter is the subject of a single scene. But sometimes heroes may want to spend days or weeks "working on" a supporting character, especially if nothing else is happening. For example, trying to seduce someone with ten minutes of witty conversation and sparkling personality can be tough—but if the hero has several days on a cruise liner to get close to the subject of his attentions, his odds improve. Use a complex skill check as described below.

First, set an opening attitude for the subject (Hostile, Neutral, or Friendly). Each day, the character can make a skill check to see how he has fared in changing the subject's attitude. An Ordinary result counts as 1 success, a Good result counts as 2 successes, and an Amazing counts as 3 successes. Six successes can shift the subject's attitude by one category (Neutral to Friendly, for example). 12 more will shift it a second category, and 24 beyond that will shift it a third category. It's a long and hard task to bring about radical shifts in a subject's attitude.

◆ **Example:** Agent Albright has to win the trust of the boss of a street gang. He's undercover as a new recruit, but the leader's right-hand man hates the new kid's face—he starts as Hostile toward the detective. Albright decides that he must win the lieutenant's respect before he can get close to the leader, so he works to convince the gangster that he's completely loyal to the gang by using his *Entertainment-act* skill. After accumulating 6 successes over a few days, he shifts the lieutenant's attitude to Neutral.

Dice and Roleplaying

An encounter scene blurs the line between mechanics and roleplaying. This is all right! Anytime the players are willing to act out what their heroes say and how they try to influence the supporting characters, encourage them to do so. You don't have to include any skill checks in an encounter scene if the heroes' words and actions dictate a particular response.

◆ **Example:** A drunken thug tries to pick a fight. If one hero eggs him on while another hero tries to calm him down, you can decide that the thug goes after the hero who's taunting him, regardless of any success the peacemaker gets. Use your common sense—a space marine in battle armor isn't going to be able to draw a cowardly clerk into a fistfight, no matter what the player says or what result the hero achieves on his *Interaction-taunt* skill check.

When Talking Doesn't Work

Despite the heroes' most persuasive arguments and delightful personalities, eventually they'll run across villains and supporting characters who aren't interested in what they have to say. When the heroes don't have anything that could possibly interest the subject of the encounter, or after they say or do things that the subject views as threatening or hostile, it's impossible for the heroes to change the subject's attitude. The subject has made up his or her mind about how to respond.

Mild-mannered supporting characters may politely excuse themselves from the conversation. If the heroes are threatening, the subject may call for law enforcement, bouncers, or even a passerby. In a pinch, the subject may flee by whatever means are available.

More aggressive characters may decide that the conversation should take a violent turn. When one side decides to attack in the middle of an encounter scene, allow the opponents an *Awareness-intuition* check to see if they anticipate the hostile reaction. Treat this as a normal surprise check (see *Chapter 3: Gamemasters in Action*), and follow with action checks for the first round.

CHAPTER 10

VEHICLES

The galaxy is constantly in motion, and so are most heroes. While some of your adventures may take place entirely within a single building or even a particular room, most adventures find heroes flinging from one end of the world to another. *Chapter 12: Vehicles* in the *Player's Handbook* lists vehicle models and their statistics. In this chapter, vehicular accessories, weapons, and expanded rules further explore vessels that travel on the land, sea, or air.



VEHICULAR ACCESSORIES

Outfitted with a variety of accessories, vehicles adapt to roles of transportation and exploration. Just about anything from the personal equipment list can be installed in a vehicle—if a hero wants a portable workshop and cutting torch in the back of a truck, all that's necessary is the money for both. However, some accessories can only be mounted on a vehicle of some kind, and aren't suitable for personal use. These are vehicular accessories.

Vehicular accessories often require a support, bracing, or custom mounting. To reflect the fact that some vehicles can carry more gear than others, each vehicle's durability rating, equal to its number of mortal boxes, represents the number of systems that can be installed. Some vehicular systems are too large or too heavy for smaller vehicles.

For purposes of customizing a vehicle, assume that a suitable body, chassis, engine, and other normal details—such as a sound system, doors and windows, and spare tires—are included in the basic price. You don't have to pay extra to get wings for your hero's plane, or tires for your hero's car. However, unusual systems such as the ones described below have a hefty price tag attached, and may not be commonly available.

System Descriptions

Almost any device from the personal equipment list can be fitted to a vehicle. Unless a hero takes this to extreme lengths (for example, trying to mount one of everything in a compact car), all he has to do is spend the money and mark it down on a vehicle record sheet. If necessary, assume that any item from the personal equipment lists weighing more than 3 kg uses 1 point of durability when installed within a vehicle.

You or your players may become interested in an accessory that isn't described below. There's no reason you can't add to the systems listed here. If there's an item you think is reasonably available in your campaign, go ahead and create it.

Ablative Module (PL 8): This ablative defensive system is a larger, more durable version of the personal ablative harness. The system provides 50 points of protective energy. Every point of mortal damage weakens the field by 3 points, every point of wound damage weakens the field by 2 points, and every point of stun damage weakens the field by 1 point. When the module's energy is reduced to 0 or fewer points, the protective field collapses. Recharging at a power source requires one hour per 10 points of field energy.

Airtight configuration (PL 5): The vehicle is sealed for airtight operation, and includes an airlock for entry. Usually, this feature is chosen for vehicles that will operate in unusual or poisonous corrosive atmospheres. Airlocks can double as

decontamination stations. Should an airtight configured vehicle lose its ability to recycle air, assume that it can contain enough man-hours of air equal to its durability rating.

Camouflager (PL 8): Using image-recognition and photoreactive materials, the camouflager allows a vehicle to blend into its surroundings. Although the vehicle can be spotted by its radar, heat, or other sensors, it's hard to see with the naked eye. At any distance greater than 10 meters, an individual visually searching for the vehicle suffers a +2 penalty to his Awareness-perception check.

Camping module (PL 5): This accessory includes panels or compartments that stow a portable cabin. A vehicle's camping module is heavier than the personal version, and includes a cabin measuring 3 meters wide and 6 meters long, with sleeping facilities for six. Purchasing one of these modules gives the equivalent of a camper canopy attached to the bed of a pickup truck. Purchasing two or more of these modules renders the vehicle into a mobile home.

Communication suite (PL 5): A communication console may be connected to several communications devices, including a radio (PL 5 or 6) or comm gear (PL 7), an orbital uplink, a cellular phone, a mass transceiver (PL 7), an emergency beacon, and a GPS receiver or inertial compass. The comm suite's transceivers are more powerful than hand-held versions, and possess twice the range of hand-held devices.

Deflection module (PL 7): A larger version of the deflection harness,

this powerful screen is designed to protect a vehicle. Against Good fire-power weapons, it adds +2 to the vehicle's resistance modifier against enemy vehicular attacks, making it harder to hit. Against Ordinary fire-power weapons such as most personal weapons, the system adds +4 to the vehicle's resistance modifier. Finally, against larger, Amazing fire-power weapons, the module increases the vehicle's resistance modifier by +1. The deflection module provides no defense against collisions or crashes.

ECM pod (PL 5): This defensive device detects and jams enemy radar transmissions. It functions as an EM detector and can also block incoming radar signals. The ECM pod is also useful against missile guidance systems and fire control radars. The pilot or operator rolls a System Operation-communications skill check to use the ECM. The result provides a modifier to an enemy's sensor checks, or the attack roll of a guided missile: Critical Failure, -1 bonus; Failure, no modifier; Ordinary, +1 penalty; Good, +2 penalty; Amazing, +3 penalty.

Ejection system (PL 5): This accessory is a standard option for military vessels, but can be equipped on any modern vehicle, including land-based ones. The ejection system includes customization and explosive bolts that allow the pilot or passenger to safely depart his vehicle with haste. Each ejection system installed can support a single individual.

EM detector (PL 5): This sensor detects and localizes electromagnetic emissions such as radar and radio. It has no jamming capability.

Excavation gear (PL 4): The vehicle is equipped with a backhoe, grader, bulldozer blade, and similar pieces of heavy equipment. Excavations of large sections of earth and sand are possible; exact specifications depend on the vehicle.

Hi-power engine (PL 5): This accessory increases a vehicle's cruising speed, maximum speed, and acceleration ratings by 20%. For example, a car with a normal cruising speed of 100 kph has a cruising speed of 120 kph with the hi-power engine option.

The performance package can be purchased any number of times, given the limits of the vehicle's durability. Of course, each accessory doubles the vehicle's base cost.

TABLE G28: VEHICULAR ACCESSORIES

System	PL	Dur	Avail	Cost
Ablative module	8	2	Mil	40K
Airtight config.	5	3	Con	5K
Camouflager	6	1	Con	8K
Camping module	5	3	Any	3K
Comm suite	5	1	Con	10K
Deflection module	7	2	Mil	25K
ECM pod	5	0	Mil	20K
Ejection system	5	1	Mil	35K
EM detector	5	0	Con	8K
Excavation gear	4	6	Any	4K
Hi-power engine	5	2	Any	*
IR detector	5	0	Com	7K
Mass detector	7	1	Con	20K
Medical suite	5	4	Com	20K
Performance pack	5	2	Any	†
Radar				
Air search	5	1	Con	15K
Air/Space	6	1	Con	25K
Multiband	7	2	Mil	50K
Surface search	5	0	Com	5K
Remote console	6	1	Con	4K
Rescue gear	5	3	Any	2K
Salvage gear	5	5	Any	8K
Science suite	6	4	Com	7K
Security system	5	0	Any	3K
Sonar	5	2	Con	40K
Stealth config.	6	2	Res	40K
Thermal imager	5	0	Con	10K
Video scanner	5	0	Con	20K

* Increase base vehicle cost by 100%

† Increase base vehicle cost by 50%

IR detector (PL 5): This sensor scans for unusual high-energy signatures in the infrared band, allowing the operator to detect vehicles by the heat of their exhaust, engines, or (in the case of fast vehicles) the friction of their passage through the air. IR detectors prove most useful against vehicles that are jamming incoming signals or aren't emitting any radio noise. The IR detector isn't as sensitive as the thermal imager, but it has a much greater range.

Mass detector (PL 7): One of the most sophisticated sensor systems available, the mass detector can instantaneously detect any significant mass within range. A passive system, it doesn't emit detectable radiation. Typically, the mass detector is

used against airborne or spaceborne vehicles; the signatures of such vehicles are not masked by contact with the ground. An operator can attempt to detect heavy vehicles or structures on the surface with a +3 penalty.

Medical suite (PL 5): This is a comprehensive emergency care unit. At PL 5 or 6, this suite consists of a first aid kit, facilities equal to a surgical kit, a medical scanner, and all appropriate medicinal supplies. At PL 7 or higher, the medical suite also includes a life support pack. Stretchers, backboards, temporary casts and splints, and other such tools are included as well. The cumulative effect of this gear provides a -2 bonus to Medical Science skill checks.

Performance package (PL 5): The

How to Read the Vehicular Accessories Table

Here are brief descriptions of what the column headings on TABLE G28: VEHICULAR ACCESSORIES mean.

PL: The age in which the system first becomes available. Out-of-date items might still be in common use in backwards areas. For more information on Progress Levels, see Chapter 9 in the *Player's Handbook*.

Dur: The number of durability points the system uses within a vehicle. A vehicle can carry a number of durability points worth of equipment equal to its mortal rating. For example, a skycar has 5 mortal boxes, so it can carry 5 points of vehicular accessories. At 6 points, excavation gear is too bulky and heavy for a skycar.

Avail: The availability of the accessory—Any, Common (Com), Controlled (Con), Military (Mil), or Restricted (Res), ranging from easiest to most difficult to obtain. Some vehicle systems are not available to just anyone with a little cash. See "How to Read the Weapons Tables" in Chapter 11: Weapons & Armor in the *Player's Handbook*.

Cost: The average cost of the accessory.

vehicle's maneuverability has been enhanced by a top-notch suspension, sensitive controls, and aerobatic control surfaces. Its drive rating improves by -1, providing a bonus to Vehicle Operation skill checks.

The performance package can be purchased up to three times. Each package increases the vehicle's cost by 50%.

Radar (PL 5): A radar system allows the operator to detect distant aircraft, spacecraft, ships on the surface of the ocean, or even vehicles moving on the ground. A skill check involving the use of radar is modified by the nature of the target; a high-flying aircraft in open space is easy to spot, but a low-flying helicopter is a different story. (See "Detection, Evasion, and Pursuit," page 133, for information on range and detection modifiers.) Radar is an active system; radar emissions can be detected by an ECM pod or EM detector.

Air search (PL 5): This radar set may be mounted on a surface vehicle for air surveillance, or on an airborne platform.

Air/Space (PL 6): This is a more powerful air search radar, used in atmosphere or in space.

Multiband (PL 7): This is an improved version of the air/space radar, with greater frequency agility and exceptional range.

Surface search (PL 5): This radar is mounted on surface vehicles for the purpose of spotting other surface vehicles such as ships at sea. It can also be mounted on an airborne platform to search for ground targets.

Remote console (PL 6): A communi-

cation suite is a prerequisite for this accessory. A vehicle equipped with this system can be operated remotely by radio control or datalink. The console includes control connections to all major systems, so that the vehicle can be started and piloted remotely. If the vehicle has any weapons, the operator of the remote may fire these normally. Using a remote console to pilot a vehicle or use any of its systems carries a +2 penalty.

Rescue gear (PL 5): This special equipment includes a rescue pack, first aid kit, magnetic clamps, fire extinguisher, chain hoist, compressor, cutting torch, portable pump, several hundred meters of synthetic rope, a toolkit, and an assortment of other useful items.

Salvage gear (PL 5): The vehicle is equipped for heavy-duty towing, salvage, and load and removal operations. It features a winch or powered chain hoist, cutting and welding gear, a compressor, pump, generator, and demolitions materials appropriate to the campaign's current Progress Level. For example, at PL 6, salvage gear will include four or five applications of plasma jelly. See "Prepared Explosives" in Chapter 11 of the *Player's Handbook*.

Science suite (PL 6): The science suite consists of a computer with appropriate databases or science programs, a comfortable workstation, and a general battery of instruments that provide a working set of tools for any Life Science or Physical Science skill checks. In addition, the hero may specify one particular specialty

skill. A scientist investigating tasks in the specialty field gains a -2 bonus to skill checks while using the science suite.

Security system (PL 5): A security system consists of a user-recognition system (at PL 5, voice-activated; at PL 6, bioelectric signature), extra-tough doors and windows, a proximity alarm, a motion or displacement sensor, and an emergency call system designed to notify the nearest law-enforcement authorities when the vehicle is stolen or broken into by someone other than the owner. A security system provides a +3 penalty to an intruder's Security-security devices or Manipulation-lockpick skill check.

Sonar (PL 5): Sonar can be used in active or passive mode. Active sonar is more likely to detect targets, providing a -2 bonus to the operator's skill check. Unfortunately, using active sonar guarantees that the searching vessel is noticed by any sonar-equipped vehicle in range.

Stealth configuration (PL 6): The vehicle is fitted with radar-absorbent coating, covered intakes, and other measures that make it difficult to detect. An enemy sensor operator using radar or infrared mediums suffers a +3 penalty to any skill check to detect a stealth-equipped vehicle.

Thermal imager (PL 5): This sensitive imaging system converts in-

Using Vehicular Accessories

Many vehicular accessories function continuously, without the need for a pilot's or operator's guidance. The hi-power engine and the ablative module are examples.

Other systems, such as the ECM pod and the IR detector, require a skill check to determine success. The accessory is controlled by a System Operation specialty skill that's appropriate. For example, using a radar aboard a jet requires System Operation-sensors.

Finally, the presence of some accessories on a vehicle may allow or assist completely unrelated skill checks. On-board medical suites, science suites, and camping modules are examples.

TABLE G29: VEHICULAR WEAPONS

Weapon	Acc	Range	Type	Damage	Ac/Rd Md	Clip	Dur	Avail	Cost
Progress Level 4: Industrial Age									
76mm cannon	+1	100/400/1500	HI (p)/G	d6w/d4+1m/d6+1m	1 F	10	4	Mil	20K
120mm cannon	+1	150/500/2000	HI (p)/A	d8w/d6+1m/d6+3m	1 F	10	6	Mil	80K
Progress Level 5: Information Age									
.50 caliber mg	0	100/400/1000	HI (p)/G	d6+1w/2d4+2w/d8m	4 A	—/50	2	Mil	20K
25mm chain gun	0	150/600/1500	HI (p)/G	2d4+1w/3d4w/d6m	4 B/A	—/15	3	Mil	25K
AA missile	-2	1 km/3 km/10 km	HI (g)/G	d8s/d8+1w/d6m	1 F	6	2	Res	40K
AT missile	-2	500/1500/5000	HI (g)/A	d6+2w/d6+4w/d4+2m	1 F	6	2	Res	60K
Progress Level 6: Fusion Age									
25mm charge gun	-1	200/800/2000	HI (p)/G	2d4+2w/3d4+1w/d6+1m	4 B/A	—/15	3	Mil	30K
76mm rail cannon	0	200/800/4000	HI (p)/G	d6+1w/d6+1m/d8+1m	2 F	10	4	Res	40K
120mm rail cannon	0	400/2000/5000	HI (p)/A	d8+1w/d8m/d12+2m	2 F	10	6	Res	120K
Laser cannon	-1	250/750/2500	En (e)/G	d6+2w/d8+2w/d4+1m	2 F	20	3	Mil	30K
Progress Level 7: Gravity Age									
Arc cannon	0	100/250/500	En (e)/G	2d8s/2d8w/2d4m	2 F	12	3	Mil	25K
Plasma cannon	0	120/500/1800	En (e)/A	2d8w/2d8+2w/d8+1m	2 F	8	5	Res	50K
Quantum cannon	0	100/400/1500	En (e)/G	2d6w/d6m/d6+2m	2 F/B/A	60/20	6	Res	75K
Progress Level 8: Energy Age									
Maser cannon	-1	300/800/3000	En (e)/A	d6+2w/d4+1m/d6+2m	3 F	20	3	Mil	30K

frared light into visible light. It is useful for spotting heat sources and seeing through darkness or bad weather, although its range is much shorter than that of an IR detector. A vehicular thermal imager allows the operator to ignore penalties in conditions that would obscure normal sight, as well as detecting nonvisible heat emanations such as concealed or recently used vehicles.

Video scanner (PL 6): This is a special sensor that sweeps an area, searching for contrast or motion. It's useful for spotting concealed vehicles or vehicles using a camouflager. Skill checks made with a video scanner gain a -2 bonus.

VEHICULAR WEAPONS

Heroes operating in dangerous areas may discover a need for firepower heavier than they can carry. Vehicular weaponry answers that need.

Like vehicular accessories, vehicular weapons require support, bracing, and mounting. To reflect the fact that some vehicles can carry larger weapons than others, each vehicle's durability rating limits the number of accessories and weapons that can be installed. Most vehicular weap-

ons use several durability points, and may be too large and too heavy for smaller vehicles.

System Descriptions

Almost any weapon from the personal weapons list can be fitted to a vehicle. Assume that any standard ranged weapon from TABLE P39: RANGED WEAPONS uses 1 point of durability, and that any heavy weapon from TABLE P40: HEAVY WEAPONS uses 2 points of durability. See *Chapter 11: Weapons & Armor in the Player's Handbook*.

From time to time, you or your players may become interested in a weapon that isn't on the list. That's okay; the list in TABLE G29: VEHICULAR WEAPONS isn't intended to be comprehensive. There's no reason you can't allow additions to the weapons described below. If there's a weapon you think is available—or will be someday in the future—create it.

PL 4: Industrial Age

76mm cannon: This is the heaviest gun that can be mounted on light tanks and vehicles that aren't really tanks. Collateral damage equal to one-half the damage rolled (round down) extends in a 2-meter radius.

120mm cannon: A typical tank gun of the Industrial Age, the 120mm cannon penetrates even the toughest of armors. Collateral damage equal to one-half the damage rolled extends in a 2-meter radius.

PL 5: Information Age

.50 caliber machine gun: The .50 caliber is a heavy machine gun designed more for antivehicular than antipersonnel use. Introduced late in Progress Level 4, it remains common

Using Vehicular Weapons

As with personal weapons, use of a vehicular weapons requires a successful skill check. In some instances, such as the .50 caliber machine gun, the weapon is controlled by a hero directly, even though it's mounted to the vehicle. In this case, Heavy Weapons is the appropriate skill.

In all other cases, the System Operation-weapons skill is used. For example, a pilot or gunner aboard a tank or a helicopter may use System Operation-weapons to fire missiles and cannons.

How to Read the Weapons Table

Here are brief descriptions of what the column headings on TABLE G29: VEHICULAR WEAPONS mean.

Weapon: The common name of the weapon.

Acc: Accuracy, an optional rule. A number other than 0 indicates that a bonus or a penalty is applied to the operator's skill check.

Range: The weapon's range, expressed as a series of numbers. The numbers represent short/medium/long range in meters.

Type: The first entry describes the form of damage the weapon inflicts: low impact (LI), high impact (HI), or energy (En). The second entry describes the weapon's class: energy (e), guided (g), or projectile (p). The class determines the modifiers due to the weapon's range (see "Vehicle Attack Modifiers").

The third entry describes the weapon's firepower: Ordinary (O), Good (G), or Amazing (A). If a weapon's firepower is inferior to the toughness of the armor or object it is used against, any damage the weapon inflicts is degraded. For example, if a weapon with Good firepower is used against an object of Amazing toughness such as a spaceship, mortal damage becomes wound damage, wound damage becomes stun damage, and stun damage is ignored.

Damage: The amount of damage a weapon inflicts when used in the proper manner. Figures are given in Ordinary/Good/Amazing order, and the appropriate damage is applied depending on the result of the operator's skill check.

Ac/Rd: An optional rule. The number defines the number of times a weapon can be used in a single round.

Mod: Mode. The column indicates whether a weapon fires a single shot per phase (F), a burst (B), or is capable of autofire (A). If the weapon can be operated in more than one mode, then the user can decide which to employ.

Clip: This weapon describes the number of shots that a weapon can fire before its clip is emptied. A number after a slash mark (/) indicates the number of bursts that can be fired from a single clip. Each use of a weapon in burst mode expends one burst (three shots) of ammunition, while each use of autofire mode expends three bursts. A dash to the left of a slash mark indicates that a weapon can't be used in single-shot mode.

Dur: The number here lists the number of durability points the system occupies within a vehicle. Vehicles can carry a total number of durability points equal to their mortal rating. For example, a sports car has 4 mortal boxes, so it can carry 4 points of accessories. At 5 points, the plasma cannon is too bulky and heavy for a sports car.

Avail: Some vehicle systems are not available to just anyone with a little cash, especially weapons. See "How to Read the Weapons Tables" in Chapter 11: Weapons & Armor in the *Player's Handbook*. It's important to remember that you have the option to make items of your choice more available—especially items from older Progress Levels.

Cost: The average cost of the weapon.

tank missile is a wire-guided or laser-designated rocket with a back-up target-imaging system. Upon impact, it inflicts one-half the damage rolled in a 10-meter radius. Six missiles are carried in the launcher, and additional ammunition may be carried in a locker as per the AA missile, above.

PL 6: Fusion Age

25mm charge gun: The light-vehicle weapon of choice at Progress Level 6, the 25mm charge gun resembles the chain gun in most respects, but uses the electrochemical firing action of a charge gun.

76mm rail cannon: This weapon uses a magnetic driver to launch a scramjet shell, which ignites after leaving the barrel and accelerates to hypersonic speeds. The blast causes collateral damage similar to the 76mm cannon.

120mm rail cannon: A fearsome skytank weapon, the 120mm rail gun launches heavy rounds to hypersonic speeds. The burst radius is similar to the 120mm cannon, above.

Laser cannon: The laser cannon uses a special fluorescing plasma mixture to generate intense bursts of light focused through an optical targeting system.

PL 7: Gravity Age

Arc cannon: A heavy, vehicular version of the hand-held arc gun developed at this Progress Level, it uses a laser to ionize a path through the air, and then delivers a massive electrical charge a split-second later.

Plasma cannon: One of the most spectacular weapons available, the plasma cannon creates a white-hot blast of superheated gas and uses a magnetic accelerator to hurl energy at the target.

Quantum cannon: Subatomic particles travel from this cannon at relativistic speeds, imparting high energy and kinetic damage to the target. The secondary cinematic effects of the restricted quantum cannon are brilliant.

PL 8: Energy Age

Maser cannon: The maser cannon uses a powerful matter reactor and a linear multiband antenna array to create devastating beams of electromagnetic energy. It combines the cutting power of a laser with intense radiant heat.

throughout PL 5 as well. Unlike other vehicular weapons, the .50 caliber can also be fired using the Heavy Weapons-direct fire skill.

25mm chain gun: This light, rapid-fire cannon is designed to knock out any armored vehicle short of a tank. Its explosive shells endanger anyone unfortunate enough to be in the area; collateral damage equal to one-half the damage rolled extends in a 2-meter radius.

Antiaircraft (AA) missile: This sys-

tem includes air/space radar, in addition to fire control systems and a backup heat-seeking mode. Six AA missiles are carried in the launcher, and each additional durability point used for ammunition represents a locker or storage compartment for four additional missiles. Upon impact, a missile inflicts one-half the damage rolled within 10 meters.

Antitank (AT) missile: Designed to pierce the heaviest armor with a shaped-charge warhead, the anti-

VEHICULAR ARMOR

Armor allows a vehicle to absorb damage when it is struck, much like a character rolls for armor after suffering damage. The cost of the armor depends on three factors: the size of the vehicle (reflected in its durability rating), the amount of armor, and the type of armor.

Alloy armor (first seen at PL 4) is made of large quantities of super-tough metal alloys such as vanadium steel. Polymeric armor (PL 6) is composed of micro-engineered plastics. Cerametal (PL 7) is made from laminated ceramics and lightweight metals. Neutronite (PL 7) is an alloy composed of compressed tungsten and disassociated neutrons. Nanofluidic armor (PL 8) is a system of smart liquid metals with extraordinary conductivity and memory characteristics.

Armor may have a durability cost, determined by the amount of armor selected. Light armor, regardless of the type, has no durability cost. Moderate armor costs 1 durability point for vehicles whose total durability is between 3 and 6 points. For vehicles of larger size, moderate armor costs 2 durability points. Heavy armor costs 4 durability points.

Example of Vehicle Customization

Castle, an infamous bounty hunter, needs to go out into the wild outback of a steppe world in order to find his quarry. He has some money and time, so he buys a sport utility, a PL 5 vehicle. The basic cost is \$30,000.

Castle needs to add a few accessories. The sport utility has 8 points of durability. Castle buys a 25mm charge gun. He also buys a camping module, since he expects to be in the bush for quite some time. These add \$28,000 to the car's price. The gun uses 3 durability points, and the module 3, so Castle has 2 more points of durability to spend. He chooses moderate cerametal armor (\$80K). Then he takes the time to add a couple other accessories from the personal equipment list—comm gear (\$175) and a GPS receiver (\$150). The total cost for Castle's ATV is \$138,325, not counting tax and tags.

The effect of armor is given on the left side of Table G30. The monetary cost of the armor, based on the durability of the vehicle, is given on the right side of the table. A dash indicates that the amount of armor isn't available for a vehicle of that durability rating; smaller vehicles can't be heavily reinforced.

VEHICLE COMBAT

Your first decision as the Game-master of a world with vehicles and vehicle combat is simple but important. Do you want to narrate the scene, or do you want to visually present it?

In the narrative style, you won't concern yourself with the exact maneuvers or position of the vehicles involved. Simply keep track of how far they are from each other, and whether they're closing, opening, holding, or attempting to break off. Maybe the jet fighter has to loop, bank, or dive to get at the other guy—the important thing is that the enemy's 5 kilometers away, and that the jet fighter is attempting to close the distance to get into cannon range. The basics of the narrative style are described in *Chapter 12: Vehicles in the Player's Handbook*.

When you lay out a visual representation of the vehicle battle on a map or diagram, loose intentions (close, open, etc.) no longer matter. If a hero wants to close the distance, he'll choose maneuvers that move his vehicle closer to the other one on the map. The range between vehicles can be determined by the map.

The advantage of the narrative style is that it runs faster. It's good when you don't want to break the flow of a roleplaying session by suddenly transforming the game into a miniatures battle. On the other hand, using the visual style is perfect for players who like detail in their combat scenes and enjoy the opportunity to show off their tactical cunning.

Setting Up the Fight

Regardless which method you choose, you have the same basic requirements for presenting the scene. You have to choose an opening range, beginning speed, and intention for each vehicle. You may also need to decide if either vehicle is likely to be surprised, just as in personal combat. Finally, if you intend

TABLE G30: VEHICULAR ARMOR

Armor Type	LI	HI	En	Dur vs. Cost		
				1-2	3-6	7+
—Light Armor—						
Polymeric	d4-1	d4-1	d4-2	2K	3K	5K
Alloy	d6-1	d6-1	d4-1	5K	10K	20K
Cerametal	d6-1	d6-1	d6-1	10K	20K	50K
Neutronite	d6	d6	d6-1	25K	50K	100K
Nanofluidic	d8-1	d8-1	d8	50K	100K	200K
—Moderate Armor—						
Polymeric	d4	d4	d4-1	—	10K	20K
Alloy	d4+1	d4+1	d4	—	20K	50K
Cerametal	d4+1	d4+1	d4+1	—	40K	80K
Neutronite	d6+1	d6+1	d6	—	100K	200K
Nanofluidic	2d4	2d4	2d4	—	300K	600K
—Heavy Armor—						
Polymeric	d4+1	d4+1	d6-1	—	—	50K
Alloy	d6+1	d6+1	d6	—	—	80K
Cerametal	d8	d8	d8	—	—	200K
Neutronite	d8+1	d8+1	d8+1	—	—	400K
Nanofluidic	2d4+1	2d4+2	2d4+1	—	—	1M

to use a square grid or a hex map to mark vehicle positions, you need to pick a scale.

Opening Range

The opening range of a vehicle fight depends on the prevailing conditions and the type of vehicles involved. Jet fighters routinely sight each other at a range of 30 kilometers. High-altitude planes can use radar to detect airborne targets hundreds of kilometers away. But a pair of automobiles playing tag in busy city streets might not see each other until they're within 50 meters.

You can decide the opening range by considering the circumstances that led to the vehicle combat, or by rolling on Table G31.

Clear conditions include a bright, sunny day; a straight, well-paved, empty road. Highways and open, high-altitude skies are examples of clear conditions.

Normal conditions include normal driving and piloting conditions. An uncrowded, winding road, light seas, and moderate-altitude skies fall into this category.

Crowded conditions occur in heavy traffic, poor visibility, and bad weather. Low-altitude skies, high seas, and congested traffic are examples of crowded conditions.

Hazardous conditions are the worst possible conditions. Inner city streets at rush hour, perilous off-road driving, total darkness, and extremely low altitudes—particularly near obstacles such as cliffs or buildings—are included in this category.

Actual detection ranges might be far greater than this under ideal conditions. See "Detection, Evasion, and Pursuit." Since most vehicular weapon ranges don't exceed the maximum possible opening range in clear conditions, there's no reason to keep track of combat scenes until vehicles approach weapons range.

Detection, Evasion, and Pursuit

When vehicles are involved, long-range modern sensors such as radar, sonar, or computer-enhanced visual scans may come into play. These devices allow the operator to make a System Operation—sensors skill check in place of an Awareness check to see how far away the potential target can be detected. See TABLE G32: VEHICLE DETECTION RANGE.

TABLE G31: OPENING RANGE

Conditions	Surface	Air
Hazardous	2d6 × 20 m	3d6 × 100 m
Crowded	4d6 × 20 m	6d6 × 100 m
Normal	3d8 × 100 m	2d4 × 5 km
Clear	6d8 × 100 m	3d4 × 10 km

TABLE G32: VEHICLE DETECTION RANGE

System	Use	Skill Check (O/G/A)
EM detector	s,a	50 km/100 km/150 km
IR detector*	a	20 km/40 km/60 km
Mass detector	s,a	10k km/50k km/100k km
Radar:		
Air search	s,a	100 km/200 km/400 km
Air/Space	s,a	200 km/400 km/600 km
Multiband	a	300 km/600 km/900 km
Surface search*	s,a	20 km/40 km/60 km
Sonar:		
active	s	10 km/20 km/30 km
passive	s	20 km/40 km/60 km
Thermal imager	s	2 km/4 km/6 km
Video scanner*	s,a	1 km/2 km/3 km

s: surface use

a: aerial use

* Range is 10 times greater from an airborne platform

Detection may be modified by obscurity—sonar is confused by turbulent waters, radar by ground clutter and poor atmospheric conditions, visual scans by darkness or fog, and so on. At your discretion, apply modifiers from TABLE G33: VEHICLE DETECTION MODIFIERS to the operator's skill check.

A Failure result indicates that the sensor operator does not detect the approaching threat until the enemy is actually in combat range; see TABLE G31: OPENING RANGE. On a Critical Failure, the operator does not detect the enemy at all, and the enemy may be able to achieve surprise.

◆ **Example:** Science Officer McHiggins is using a bomber's air search radar to keep an eye out for danger. On an Ordinary result, the hero spots the enemy at a range of 100 km; on a Good result the hero spots the enemy at 200 km; and on an Amazing result, the hero spots the enemy at 400 km. If McHiggins fails her System Operation—sensors check, the enemy aircraft closes to combat range undetected.

If a vehicle operator spots an opponent before it gets within combat range, the operator may choose to flee and avoid combat altogether. Compare the maximum speeds of the vehicles. If the fleeing vehicle is faster, it gets away. If the pursuing vehicle is faster, it eventually catches up and forces combat. You may allow special tactics or conditions to automatically evade the attack. Maybe the skytank can round a cliff and fly into a hangar, for example.

TABLE G33: VEHICLE DETECTION MODIFIERS

Obscurity	Modifier
Critical	+3
Marginal	none
Ordinary	-1
Good	-2
Amazing	-3



Skycar engineers install a charge gun

Beginning Intentions

Opening speed is easy: How fast was each vehicle going before the encounter occurred? In normal or clear conditions, assume that each vehicle was moving at its listed cruising speed.

Examine the situation that led to the scene and decide what direction each vehicle is heading. If one vehicle pursued the other, then the fleeing vehicle begins with an intent to open, while the pursuer begins with an intent to close. If the vehicles were paralleling each other, both might begin with an intent to hold.

In the narrative style, an intent to close means that the vehicle is heading toward the other, an intent to open or break means that it's heading away from the other, and an intent to hold means that it's heading off to one side, or matching speeds.

Surprise

The same rules for surprise in personal combat apply to vehicle combat, with one exception—in the surprise phase, the surprised vehicle doesn't stand still; it moves straight forward at its current speed without maneuvering.

Tactics—vehicle tactics is the appropriate skill for setting up a vehicle ambush. The degree of success of the ambush leader's Tactics check inflicts a +1, +2, or +3 penalty to the victim's Awareness or System Operation—sensors skill check to avoid surprise.

In addition, the conditions may provide a modifier. Hazardous conditions provide a +2 penalty to the victim's surprise check. Crowded conditions add a +1 penalty. Normal conditions apply no modifier, and clear conditions provide a -2 bonus.

◆ **Example:** A skytank commander attempting an ambush rolls an Amazing result on his Tactics—vehicle tactics check (+3). The conditions are crowded (+1). The opposing vehicle operator must make a successful check with a +4 penalty (1+3=4) to avoid surprise.

Scale

Setting a scale for the battle is necessary if you're using a grid or a diagram to represent the combat visually. Vehicles move a number of meters each phase equal to their speed in kph. So, a car traveling at 80 kph covers 80 meters in each

phase of the action round. Make sure your scale is set large enough.

Unless you have a very large hex sheet or playing area, you won't want vehicles to travel more than three or four hexes each phase. Otherwise, you'll be forced to shift your map constantly.

► Surface vehicles travel between 20 and 200 kph under normal circumstances; a scale of 20 or 40 meters per hex is appropriate.

► Aircraft travel between 100 and 3,000 kph; a scale of at least 200 meters per hex or square is appropriate. Long-range missile attacks of 30 or 40 kilometers may give you trouble, so you could use a scale of 1 kilometer per hex if necessary.

The Action Round

In vehicle combat, the action round proceeds exactly like the action round in personal combat, with two key exceptions. First, a vehicle moves in each phase of the round at its current speed. A car racing along at 200 kilometers per hour covers 200 meters per phase, every phase. Changing this speed requires a deliberate maneuver on the part of the driver.

The second key feature of the action round in vehicle combat ties into vehicle maneuvers. Any character at the controls of a vehicle is allowed to make a Routine maneuver in each phase of the action round to keep his vehicle under control and make it go where he wants. This means that the driver or pilot gets "free" actions to maneuver the vehicle even during the phases where his own action check didn't allow him to act.

◆ **Example:** Captain Iannotti gets an Ordinary result on her action check. During the Amazing and Good phases of the round, she can make a Routine maneuver with her fighter jet even though it's not her phase to act yet.

In order for a pilot to perform more than a Routine maneuver, a hero must wait for the phase determined by her action check. Attempting more complicated maneuvers—moderate or extreme stunts—requires the hero to wait until she has an action available. If the hero wants to shoot a weapon or operate a system in the vehicle, this also requires an action.

**Vehicle Operation
Modifiers**

Clear conditions.....	-2
Routine conditions.....	0
Crowded conditions.....	+1
Hazardous conditions.....	+2
Traveling faster than cruising speed.....	+1
Traveling at max speed.....	+3
Moderate maneuver (if no other penalties).....	+1
Extreme maneuver (if no other penalties).....	+3
Pilot attempting second action (such as firing).....	+2
Spin or spin out.....	+2
Skid or yaw.....	+1
Vehicle damage:	
Stuns more than half.....	+1
Wounds more than half...	+1
Mortal, per point.....	+1

**Narrative
Combat**

The narrative combat system is described in the *Player's Handbook*. Here, you must balance roleplaying fun with elements of realism. The rules in the *Player's Handbook* offer guidelines, but much of the time it will be up to you to determine how tough a maneuver is, what modifiers to apply, and the specifics of how a situation resolves. Be sure to apply the modifiers from the "Vehicle Operation Modifiers" list on this page.

There are a few critical things to remember. A pilot or driver can't change his range intention without succeeding at a Moderate maneuver. Basically, a Moderate maneuver allows the pilot to alter his intention by one category—from close to hold, from hold to either open or close, from open to hold or break, or from break to open. If he succeeds at an Extreme maneuver, he can change his range intention by up to two categories.

As part of any vehicle maneuver, a hero may accelerate or decelerate. TABLE P42: VEHICLES in the *Player's Handbook* lists the acceleration (in kph and meters per phase) of each vehicle. Usually, vehicles decelerate at the same rate. A land vehicle can decelerate at twice its acceleration if the operator succeeds on a Moderate maneuver.

Visual Combat

If you represent the vehicles involved in combat on some kind of hex map or grid, everything works just like it does when you use the narrative technique to run the scene—with two key differences. First, the need for range intentions disappears. With a hex map or grid, it's easy to see who's heading where and what the range is.

The second difference between narrative and visual combat lies in how maneuvers work. Each grade of maneuver (Routine, Moderate, or Extreme) allows a specific range of possible adjustments or turns for a vehicle moving on the hex field. The pilot can choose to make a maneuver at any point during his vehicle's maneuver that phase. For example, a vehicle moving six hexes could complete a turn beginning in the first hex or any hex up until the last.

The complexity of the maneuver attempted governs the type of check to be made—if the hotshot pilot decides to try a half-loop, it's a Moderate maneuver.

To determine who moves when in each phase, you'll need to determine who has the *advantage*. Each round, the pilot with the best action check result has the advantage. In the event of a tie, the pilot with the superior action check score wins.

In each phase, the pilot with the advantage can choose to maneuver his vehicle first or to allow his opponent to move first instead. Moving first might allow a vehicle to get into a good position to shoot before the enemy responds, or to get out of the enemy's sights before the enemy fires a weapon. Moving second offers the hero a chance to see where the enemy is going before committing to any movement.

A pilot keeps the advantage until he fails a maneuver check. When this happens, the advantage automatically shifts. The advantage might shift back and forth several times in the course of a single round.

**Failing a Vehicle
Operation Check**

A pilot who fails a Vehicle Operation check may or may not complete his maneuver as intended. Just as in the narrative system, the pilot must immediately make a second Vehicle Operation check. The result of the check determines the outcome, as

**Vehicle Attack
Modifiers**

Conditions/Cover	
Hazardous/heavy cover...	+3
Crowded/medium cover ..	+2
Normal/light cover	+1
Clear/no cover	0
Energy weapon	
Short range	-1
Medium range	0
Long range	+1
Guided weapon	
Short range	0
Medium range	-1
Long range	0
Projectile weapon	
Short range	-1
Medium range	+1
Long range	+2
Personal weapon.....	+1
Also add weapon's normal range modifier	
Heavy weapon	+1
Also add weapon's normal range modifier	
Attacker is piloting and making a moderate or extreme maneuver	+2
Target vehicle's maneuver in current phase	
Out of control	-2
None	-1
Routine	0
Moderate	+1
Extreme	+3
Target motion	
motionless	-1
at or near max speed.....	+2

described on TABLE P44: LOSING CONTROL OF A VEHICLE on page 201 in the *Player's Handbook*.

Vehicle Scales

When vehicles moving on different scales meet in battle—say, a jet lighter strafing a car—assume that the faster-moving vehicle appears on the map at the extreme limit of its weapon range or the target's weapon range, whichever is greater, and adjust the faster vehicle's scale to the slower vehicle. For example, a car driving at 160 kph might cover four 40-meter hexes in each move, but a jet flying at 640 kph actually zooms 16 hexes per phase in the car's frame of reference. You'd normally use a much more compressed scale for the jet's movement, but since you have to compare it to a car, you have to use the lowest common denominator.



Vehicle Maneuvers Visualized

Routine Maneuvers (no modifier)

Only one Routine maneuver is allowed per phase. Performing a Routine maneuver doesn't impose a penalty to the operator's skill check like more difficult maneuvers do, although adverse or favorable conditions may impose one or more modifiers.

► **Bank/Veer:** The vehicle slides one hex ahead and over, changing its facing in the direction of the turn. For aircraft, this is a bank; for ground vehicles it's a veer or swerve.

► **Roll/Drift:** The vehicle slides one hex ahead and over, but maintains its original facing. For aircraft, this is a roll or a sideslip; for cars, it's a lane change or a drift.

► **Turn:** The vehicle moves forward one hex and changes facing by one hexside.

Moderate Maneuvers (+1 penalty)

A vehicle can only attempt a Good maneuver if the pilot or driver uses an action to do so. If a pilot executes a Routine maneuver and fires a weapon or uses a vehicle system in the same phase, it's considered a Moderate maneuver. Moderate maneuvers impose a +1 penalty to the pilot's Vehicle Operation check.

► **Half-loop (aircraft only):** The aircraft moves forward one hex and reverses direction while keeping its current speed.

► **Long roll (aircraft only):** The aircraft executes two rolls, keeping its facing but sliding two hexes ahead and to the side.

► **Regain control:** A vehicle that's out of control in a skid or a spin, can attempt to pull out with a Moderate maneuver check.

► **Tight turn:** The vehicle alters its facing by two hexsides, moving one hex between facing changes.

Extreme Maneuvers (+3 penalty)

Extreme maneuvers are the most drastic—and dangerous—moves possible. In addition, if a pilot or driver executes a Moderate maneuver and fires a weapon, uses Tactics, or takes another action in the same phase, the Moderate maneuver is treated as an Extreme maneuver.

► **Hard bank/Hard veer:** This consists of two bank/veer maneuvers in the same phase.

► **Hard skid (ground only):** The vehicle comes to a dead stop at the end of its move in this phase, facing in any direction desired.

► **Loop and turn (aircraft only):** The aircraft moves forward at least one hex and then turns to face any direction desired, continuing its movement at present speed.

When the fast-moving vehicle flies off the end of the map, use the return times suggested in TABLE P46: VEHICLE SCALE RETURN TIME on page 204 in the *Player's Handbook*. When it returns, it shows up on the same side of the map it left from. If a pilot wants to loop back to another side of the map, it takes twice as long as listed on Table P46.

Attack and Defense

Using a vehicle system to attack or to defend against an attack requires an action on the part of a character in the vehicle. A gunner or passenger can operate a weapon any time he can perform an action. The pilot or driver can do so too, but operating a weapon system and performing a maneuver in the same phase adds difficulty to the maneuver check.

One useful tactic in vehicle combat is holding an action. If the gunner doesn't have a good shot in the Amazing phase, he can always wait until the Good, Ordinary, or Marginal phase to see if a better shot develops. Sometimes, a vehicle might be in a great position early in the round—but if no one on board has an action available, no shot takes place. Such is the stress and uncertainty of combat. Maybe the gunner's trying to lock in the target, arm the weapon, or program the search pattern. Maybe the pilot is a little disoriented from the last high-g maneuver.

The attacker applies any modifiers from the "Vehicle Attack Modifiers" sidebar to his skill check that are appropriate to the situation.

Attack and Defense Skills

The mechanics for attacking with a vehicular weapon system are just like attacking with a personal weapon. The target may have a resistance modifier, reflecting how hard it is to hit; it may be at short, medium, or long range; it may have some kind of cover. The skill used by the attacking character depends on the weapon fired.

► **Personal Weapon:** A hero can lean out the window and fire a gun at the bad guys. This is a normal attack using the hero's Modern Ranged Weapons skill. This is not possible for aircraft at high altitudes or high speeds (400 kph or faster).

► **Heavy Weapon:** A hero could lean out the window and fire a heavy weapon, or a heavy weapon might be attached to the vehicle in a unpowered mount—a .50 caliber machine gun in the back of a jeep, for instance. Use the appropriate Heavy Weapons specialty skill.

► **Weapon and Defense Stations:** Many vehicles include powered weapons systems integral to the vehicle. This includes all vehicle weapons listed in TABLE G29: VEHICULAR WEAPONS, except for the .50 caliber machine gun. These onboard weapons rely on the System Operation-weapons skill.

Vehicle Damage

Vehicles sustain damage much like living characters do. They have stun, wound, and mortal ratings; wound or mortal damage inflicted by enemy weapons causes secondary damage; and the vehicle's armor may stop some or all of the primary damage of a hit. There are two key differences to be aware of, though.

Many vehicles, unlike most personal targets, have Good toughness. This means that the damage from weapons of Ordinary firepower—including most personal weapons—automatically degrades. Mortal damage becomes wound damage, wound damage becomes stun damage, and stun damage is ignored. For example, a hero who fires a 9mm pistol at the enemy's vehicle may roll for damage and appear to inflict 6 wounds. He inflicts only 6 stuns. Any armor the car has may further reduce or entirely negate that damage.

Heavy weapons are more useful against vehicles, since many of these have a firepower of at least Good. Their damage doesn't degrade against tough targets. Most vehicular weapons are also rated for at least Good firepower, and chew up tough vehicles just as badly as they do unarmored characters.

Excessive stun or wound damage impairs a vehicle's performance. The pilot of a vehicle that has lost more than half of its stun or wound points must make an immediate skill check to see if he loses control. In addition, any skill attempted using the vehicle or its systems—Vehicle Operation or System Operation—suffers a +1 penalty until the damage is repaired. It's harder to pilot or shoot from a damaged car or plane.

Bombs

Using explosive munitions to neutralize strategic targets goes beyond the scale of combat presented in the typical heroic adventure. In those cases when a story demands the use of truly explosive firepower, bombs—either dropped from the air or launched—offer an opportunity for mass destruction. The area of effect of a bomb can vary from a dozen meters to a dozen kilometers.

Several payloads can be carried aboard a bomb. Conventional high explosives do high impact (HI) or fire (En) damage to targets. Chemical weapons may cause acidlike effects to objects and individuals (see "Hazards" in Chapter 3). Biological weapons can cause disease or plague (see "Hazards" in Chapter 3). Finally, nuclear and mass reaction bombs can level landscapes.

When a vehicle loses all of its stun or wound points, a durability check must be made for the vehicle. A vehicle's skill check for this score is equal to its stun point total. If the vehicle passes its durability check, nothing happens. If the vehicle fails, it stalls and can't be started again until it's repaired or juryrigged. Thereafter, as with characters, excess stun damage becomes wound damage (at the rate of 2 stuns equal 1 wound), and excess wound damage becomes mortal damage (at the rate of 2 wounds equal 1 mortal).

Mortal damage has the chance to disable a vehicle with a single roll. Every time a vehicle sustains mortal damage, it must make a durability check. The vehicle's skill score for this check equals its stun rating, but don't forget to include a +1 penalty for each mortal box and any other penalties accrued for stuns or wounds. If the vehicle fails to pass its durability check, it ceases to function until repairs are made. On a Critical Failure, a vital system breaks down and the vehicle explodes. Passengers suffer d8+1 mortal points of energy (En) damage; characters within 6 meters suffer 2d6+1w, and characters within 12 meters suffer d8-1w.



CHAPTER 11

SPACESHIPS

Every starfaring hero dreams about sailing through the galaxy in his own starship. A hero with a ship no longer has to rely on commercial schedules, the vagaries of working for passage on tramp freighters, or the command structure of military transport. A ship captain is the master of his destiny, able to come and go as he pleases. Of course, the ship itself can become a crucial member of a hero party, especially once it's been modified and equipped with the finest systems that money can buy.

SHIP CONSTRUCTION

A ship's hull type describes its basic size, arrangement, and purpose. The hull contains a number of compartments. Each compartment contains vital equipment or systems such as the engineering plant, weapons and defensive systems, cargo, and crew facilities. A small vessel such as a launch-only has 2 compartments within its hull, while a medium freighter has 12 compartments. Ship compartments also represent how tough the ship is to destroy—when all sections have been ruined by enemy fire, the ship is wrecked.

A spaceship's durability is equal to its number of mortal points. These points are divided among all of the ship's sections, thus giving each compartment its own durability.

A compartment's durability serves two functions: It describes how much damage the compartment can sustain, and it limits the number of systems an individual compartment can contain. For example, a compartment with 6 mortal points can carry up to 6 durability points of systems.

Unlike other vehicles that come equipped with standard systems and can be outfitted with accessories, spaceships are initially empty. Every system must be accounted for and fit within a compartment's durability.

TABLE G34: SHIP HULLS shows the types of hulls available and gives basic statistics for each hull type. Regardless of which hull a ship is based on, the ship has Amazing toughness. If a weapon has less than Amazing firepower, any damage the

TABLE G34: SHIP HULLS			
Civilian Hulls			
Hull	Comp	Durability	Cost
Launch	2	8	50 K
Courier	4	16	100 K
Trader	6	24	200 K
Lt freighter	8	32	300 K
Transport	10	40	500 K
Med freighter	12	48	1 M
Military Hulls			
Hull	Comp	Durability	Cost
Fighter	2	10	100 K
Cutter	4	20	250 K
Scout	6	30	500 K
Attack	8	40	1 M
Escort	10	50	2 M
Corvette	12	60	5 M

weapon inflicts degrades. For example, if a weapon with Good firepower is used, mortal damage becomes wound damage, wound damage becomes stun damage, and stun damage is ignored. If a weapon of Ordinary firepower is used, mortal damage becomes stun damage, and wound and stun damage is ignored.

Hull describes a particular class of spacecraft, from small launch- and fighter-class ships to moderate-sized medium freighters and corvette-class vessels.

Comp indicates the maximum number of separate compartments that a ship's systems may be divided among. A ship may have fewer compartments than this number, but not more.

Durability is the total durability, or mortal rating, of the ship. The durability value listed here is divided among the compartments to form their individual durability ratings. Military hulls can carry more systems because of their sturdier construction and spartan arrangement. (For example, the designer of a fighter with a total durability of 10 may divide its points evenly, forming two compartments of 5 durability each.) No compartment can contain more than 10 durability points, unless the Gamemaster is designing an extraordinary alien vessel.

Cost is the cost of the empty hull, without any compartments or systems.

TABLE G35: COMPARTMENTS

Type	System Types Allowed	Cost
Command	Communication, computer, crew, defense, sensor, weapon	150K
Engineering	Cargo, drive, engine, power, support	100K
Weapons	Defense, weapon	30K
Auxiliary	Power, support	30K
Electronics	Communication, computer, defense, sensor	50K
Cargo	Cargo	10K
Crew	Crew	30K

Compartments

A ship may include dozens of different systems—sensors, power plants, cargo holds, weapons, and so on. For purposes of determining where things are and what system gets hit by enemy fire, all systems are grouped into compartments. Some compartments are more exposed (and thus more likely to be hit) than others, as TABLE G50: COMPARTMENT HIT LOCATION illustrates (page 161). These exposed sections, generally the higher-numbered compartments, are good places to put nonvital cargo holds or support systems.

The ship's designer can select how to divide the total durability of the ship among its compartments; compartments may have different durability values up to a maximum durability of 10.

All compartments have stun and wound ratings equal to twice their durability. TABLE G35: COMPARTMENTS lists the types of systems allowed within each compartment and the cost of each compartment. The cost listed is for installation of the compartment itself, regardless of how many durability points are assigned to it.

Spacecraft Scale

The construction rules presented here allow for starships of small to moderate size. In general, don't place large and extremely powerful ships in the hands of the heroes; most campaigns focus on light freighters and scout ships, not heavy cruisers or dreadnoughts.

Command Compartment

A ship must have at least one command compartment. This is the heart of any ship, the basic nerve center for the vessel. The compartment includes the command deck with seats for crew, controls, and displays necessary to run the ship. All ship systems can be controlled at a station in the compartment they're installed in, or at the command deck. The command compartment also contains the ship's gear locker.

Command compartments can support a variety of systems, including weapons, defenses, sensors, and communications. Smaller ships often carry all their fighting capability in this compartment, and all the engineering machinery in an engineering compartment. In smaller vessels, the command compartment may also hold spartan crew accommodations.

Engineering Compartment

A ship must have at least one engineering compartment. The ship's engines are located here, and in many cases its power plant and life-support as well. If the ship is equipped with a stardrive or other FTL drive system, the engineering space must contain this machinery.

Weapons Compartment

Weapons compartments are used for mounting weapon and defensive systems. Some weapons may be mounted in turrets, but the machinery, weapon controls, and magazines are internal structures that take up space in the hull.

Auxiliary Compartment

These compartments contain nonvital engineering equipment, such as secondary life support and power systems. Main power systems may be located in auxiliary spaces to lessen the importance of any single compartment.

Electronics Compartment

Electronics spaces are reserved for fragile, high-value systems such as computers and sensors systems. Defensive systems of all kinds can also be installed within electronics compartments.

Cargo Compartment

These compartments are designed for carrying cargo or fuel tanks. (Progress Level 6 ships require substantial reserves of hydrogen fuel for their engines.) Hangar bays, docking modules, and other such facilities can be put in cargo compartments.

Crew Compartment

These spaces primarily serve as living space for passengers or crew. Other uses include labs, sick bays, workshops, lounges, entertainment facilities, and so on.

Airlocks

Every ship requires an entryway, and every ship automatically has one airlock as part of the hull. This first airlock consumes no durability and can be designed as part of any compartment. Airlocks aren't simply doors; they contain a short chamber or corridor that cycles air pressure.

Some ship designers like to have a backup airlock or two—just in case. Maybe there's a fire on board, or maybe the compartment carrying the first airlock is destroyed. Additional airlocks cost \$10K and 1 durability point to install; like the first airlock, they can be installed in any compartment.

Cargo holds automatically include external loading hatches, though these aren't considered airlocks.

Systems

To this point, the ship is an empty shell. The systems in each compartment will provide it with power, life support, engines, sensors, weapons, defenses, and all the other components necessary to make it a serviceable spacecraft.

Each system uses a certain number of a compartment's durability points, depending on the system's size and bulkiness. Once a compartment's durability points have been filled, it can't hold any more systems.

Systems fall into one of 11 general categories: cargo, communications, computer, crew, defenses, drive, engineering, power, sensors, support, and weapons. System cost, availability, progress level, durability, and power requirements are listed on TABLE G36: SPACESHIP SYSTEMS and TABLE G44: SPACESHIP WEAPONS.

In some instances, a ship designer may purchase more than one of the same system. Sometimes, this is done to include two mass cannons instead of one; in other cases, multiple power plants may be required to power all of a ship's systems.

Three systems that can be included in any compartments are airlocks, escape pods, and reentry capsules. See the sidebars on "Airlocks" and "Reentry Capsules, Escape Pods, & Boarding Pods" in this chapter.

A ship must contain life support, a power plant, engines, and sensors. Ships of Progress Level 6 must also include fuel tanks for their fusion power plants and engines.

Power Systems

The most important system of a starship is its power plant. Firing weapons, maneuvering, or raising defensive screens or shields takes energy. If a ship's power plant is knocked out, it can't maneuver, fire weapons, or use most of its defenses.

A ship's power plant provides power factors to all onboard systems. If a ship doesn't generate enough power to use all of its systems at one time, the engineer must choose which systems are powered and which are unpowered. Changing the power configuration—depowering systems and powering up new ones—requires an action on the part of the ship's engineer. Power plants can be installed in auxiliary or engineering compartments.



Engineers tend to the heart of the ship

TABLE G36: SPACESHIP SYSTEMS

Type	System	PL	Avail	Cost	Dur	Pow	Notes
—	Airlock	6	Com	10K	1	0	1 unit built into hull
—	Reentry capsule	6	Con	5K	1	0	1 unit built into hull
—	Boarding pod	7	Mil	100K	2	0	
—	Escape pod	7	Com	50K	2	0	
Pow	Fusion generator	6	Con	100K	2	*	Per 3 power factors generated
Pow	Grav-fusion cell	6	Con	200K	5	*	Per 10 power factors generated
Pow	Solar cell	6	Con	100K	3	*	See system description
Pow	Mass reactor	7	Con	200K	2	*	Per 5 power factors generated
Pow	Matter converter	8	Mil	500K	2	*	Per 7 power factors generated
Eng	Fusion torch	6	Con	50K	3	1	Per movement point generated
Eng	Ion engine	6	Con	100K	2	1	Per movement point generated
Eng	Photon sail	6	Con	100K	5	*	See system description
Eng	Planetary thruster	6	Con	100K	1	1	Per 20 durability of ship
Eng	Induction engine	7	Con	200K	2	2	Per movement point generated
Eng	Stabilizer	7	Mil	250K	1	0	Per 20 durability of ship
Eng	Inertial flux engine	8	Mil	250K	1	1	Per movement point generated
Drv	Stardrive	7	Con	1 M	3	*	See system description
Drv	Drivewave	8	Mil	2 M	1	*	See system description
Sup	Life support unit	6	Com	20K	1	1	Per 20 durability supported
Sup	Recycler unit	6	Com	50K	1	1	
Sup	Workshop	6	Com	20K	2	1	
Sup	Accumulator	7	Con	40K	1	*	See system description
Sup	Autosupport unit	7	Com	200K	0	1	Per 20 durability supported
Sen	Air/Space radar	6	Com	20K	0	0	
Sen	EM detector	6	Mil	10K	0	0	
Sen	IR detector	6	Con	20K	0	0	
Sen	Mass detector	7	Con	50K	1	0	
Sen	Multiband radar	7	Com	25K	0	0	
Sen	Remote network	7	Mil	500K	2	2	
Sen	Spectroanalyzer	7	Con	100K	1	1	
Sen	CE passive array	8	Mil	300K	2	1	
Sen	Multiphase radar	8	Mil	250K	1	0	
Def	Armor	*	*	*	*	0	See armor description
Def	Chaff	6	Mil	50K	1	0	
Def	Damage control	6	Mil	*	1	1	Per 20 durability protected
Def	Jammer	6	Res	100K	0	1	
Def	Point-defense gun	6	Res	200K	1	1	
Def	Deflection inducer	7	Mil	250K	1	2	Per 20 durability of ship
Def	Ablative shield	8	Mil	500K	2	*	Per 20 durability of ship
Def	Displacer	8	Res	1 M	2	3	Per 20 durability of ship
Comm	Laser transceiver	6	Com	20K	0	1	
Comm	Radio transceiver	6	Com	10K	0	1	
Comm	Mass transceiver	7	Con	100K	1	1	
Comp	Computer core	6	Com	*	*	0	See computer description
Comp	Battle	6	Mil	*	0	0	See computer description
Comp	Communications	6	Com	*	0	0	See computer description
Comp	Defense	6	Con	*	0	0	See computer description
Comp	Engineering	6	Com	*	0	0	See computer description
Comp	Navigation	6	Com	*	0	0	See computer description
Comp	Science	6	Com	*	0	0	See computer description
Comp	Sensors	6	Com	*	0	0	See computer description
Crew	Crew quarters	6	Com	20K	1	0	Per 6 crew members
Crew	Lab section	6	Com	100K	2	0	
Crew	Passenger suite	6	Com	50K	1	0	Per 2 passengers
Crew	Sick bay	6	Con	100K	2	0	
Car	Cargo space	6	Com	10K	1	0	Per 24 cubic meters of storage
Car	Fuel tank	6	Com	10K	1	0	Per power plant/engine fueled
Car	Hangar	6	Com	25K	1	0	Per 1 durability pt. of vehicle
Car	Autocargo	7	Com	30K	1	1	Per 24 cubic meters of storage

How to Read the Systems Table

Here are brief descriptions of what the column headings on TABLE G36: SPACESHIP SYSTEMS mean.

Type: The classification of the system: — (Any), Pow (Power), Eng (Engine), Drv (Drive), Sup (Support), Sen (Sensor), Def (Defense), Comm (Communication), Comp (Computer), Crew, or Car (Cargo). The type of a system determines the compartment(s) into which it can be placed.

System: The common name of the system.

PL: The age in which the system first becomes available. For more information on Progress Levels, see Chapter 9: Goods & Services in the *Player's Handbook*.

Dur: The number of durability points the system uses within a ship compartment. A compartment can carry a number of durability points worth of systems equal to its mortal rating.

Pow: The number of power factors the system uses.

Avail: The availability of the system—Common (Com), Controlled (Con), Military (Mil), or Restricted (Res), ranging from easiest to most difficult to obtain. Some vehicle systems are not available to just anyone with a little cash. See "How to Read the Weapons Tables" in Chapter 11: Weapons & Armor in the *Player's Handbook*.

Cost: The average cost of the system.

Notes: Information about the system may be given here, such as how many units of a specific system must be installed to support a vessel, or the number of power factors that a power plant generates.

Reentry Capsules, Escape Pods, & Boarding Pods

Sometimes, things don't work out quite as planned, and a reentry capsule or an escape pod can help a ship's crew deal with the unexpected.

Every ship (PL 6 or PL 7) has one reentry capsule as part of the hull. This first capsule consumes no durability and can be designed as part of any compartment. A reentry capsule has room for a single individual and includes an 48-hour oxygen supply. After ejection, the capsule drifts through space or can descend from orbit to a planetary surface. Some ship designers like to have an additional capsule or two—just in case. Additional capsules cost \$5,000 each and 1 durability point to install; like the first capsule, they can be installed in any compartment.

An escape pod is a PL 7 system costing \$50K and 2 durability points. An escape pod is an optional system that doesn't come integrated into any ship's hull. It has space for up to eight, and sufficient power, food, and water for four weeks. It has no spacefaring engine, but if it's launched while in orbit around a planet or other large body, landing is possible. Launching an escape pod is a simple action not requiring a skill check, taking only a single phase. All escape pods come equipped with a continuous-broadcast beacon.

Essentially an escape pod modified for a military application, the boarding pod costs 2 durability points and \$100K. Like the escape pod, it's an optional system that doesn't come integrated into any ship's hull. Equipped with a small engine, fastening clamps, and cutting torches, the boarding pod can be used to infiltrate enemy vessels. Its engines limit its use to targets that are no longer accelerating. The boarding pod has room for as many as ten individuals and a small amount of gear.

Fusion Generator (PL 6)

The principal power source of the Fusion Age, the fusion generator converts atomic energy into electrical power for use throughout the ship. Most are designed with fail-safe systems to shut down in the event of damage. Fusion generators require large amounts of hydrogen fuel.

Grav-Fusion Cell (PL 6)

This power system uses the existing gravitational fields of large masses to compress and enhance the reaction of a fusion generator. It's quite bulky, but somewhat more powerful than a fusion generator of similar capability. Like a fusion generator, each grav-fusion cell requires a fuel tank.

Solar Cell (PL 6)

A solar cell relies on power from a nearby star. The number of power factors each solar cell generates is determined by the distance from the nearest star. Refer to TABLE G37: SOLAR CELLS.

You may adjust the ranges on Table G37 if a ship is near an especially large, powerful star that would shed more energy or a small, weak star that would shed less. Well-developed and colonized star systems may power solar cells along star lanes within a system. By projecting a laser beam over the course of a star lane, ships using solar cells can draw power at greater ranges, even beyond 50 AU from the typical star. This artificial power method provides Amazing conditions, as noted on Table G37.

TABLE G37: SOLAR CELLS

Distance From Star	Condition	Power Factors Generated
< 0.5 AU	Amazing	6/cell
0.5-5 AU	Good	4/cell
5-50 AU	Ordinary	2/cell
> 50 AU	Marginal	0*

* Cells may be powered artificially by lasers.

Mass Reactor (PL 7)

A powerful source of energy harnessed by humanity to begin the Gravity Age, the mass reactor uses a form of exotic, nonbaryonic dark matter particles and harnesses the dark matter decay reaction, releasing vast amounts of energy. Mass reactors are the power source of choice in Progress Level 7; they're much more efficient than older power sources, and they can also provide sufficient energy to operate a star-drive.

Mass reactors only require refueling of their integrated dark matter chambers once every few months. This can be accomplished at any shipyard or specialized facility.

Matter Converter (PL 8)

This advanced power plant creates energy through the total conversion of mass to energy. Literally anything can be used as fuel; even hydrogen, the lightest element, provides a vast amount of power for the conversion of a minuscule amount of mass. In Energy Age campaigns, matter converters are more powerful than mass reactors, but remain more expensive.

Engine Systems

After the power plant, the engine is the second most important system of a starship. Depending on the size and power of the engine and the amount of energy provided by the power plant, a ship may move like a streaking greyhound or a plodding ox. Ships designed for combat or other maneuver-intensive purposes often carry several engines in order

TABLE G38: SHIP MANEUVERABILITY

Durability	Movement Points Generated						
1-10	—	—	—	—	1	2	3+
11-20	—	—	—	1	2-3	4-5	6+
21-30	—	—	1	2	3-4	5-6	7+
31-40	—	1	2	3-4	5-6	7-8	9+
41-50	1	2	3	4-5	6-7	8-11	12+
51-60	1-2	3	4	5-6	6-8	9-13	14+
Maneuver Rating	+3	+2	+1	0	-1	-2	-3

to provide extra maneuverability during combat.

A ship's engines harness the energy output of its power plant and convert it to maneuvering capability, represented by movement points. Larger and more advanced engines produce more movement points; they also require more power. The durability cost and power consumption of each engine is listed on TABLE G36: SPACESHIP SYSTEMS. For example, an induction engine converts 2 power factors into 1 movement point.

Refer to TABLE G38: SHIP MANEUVERABILITY. Compare the ship's durability with the number of movement points its engines generate. The result at the bottom of the table is the spaceship's maneuver rating.

The maneuver rating listed is the bonus or penalty the spaceship applies to its pilot or helmsman's Vehicle Operation-space vehicle skill checks.

The maneuver rating also helps to determine a ship's acceleration and cruising speed. Refer to TABLE G39: SHIP ACCELERATION & CRUISING SPEED.

Compare the type of engine used with its maneuver rating to determine the ship's acceleration in megameters (Mm) per phase per phase and cruising speed in AU per hour. Because of their relatively low acceleration, the cruising speed of PL 6 ships is much slower than that of PL 7 vessels.

◆ **Example:** Captain Cade's scout has 30 durability points. He outfits it with an 8 durability induction engine, which turns 8 power factors into 4 movement points. Reading from the "21-30" durability row across to the "3-4" column and then down, Cade's player sees that his engine is powerful enough to provide a -1 bonus to the ship's maneuverability. Next, he refers to Table G39, which tells him that his induction engine with a -1 rating accelerates at 3 Mm each phase and has a cruising speed of 2 AU per hour. Of course, the ship designer still has to include a power plant that produces enough energy to run this engine.

TABLE G39: SHIP ACCELERATION & CRUISING SPEED

Maneuver Rating	Photon		Ion		Fusion		Induction		Inertial Flux	
	Acc	Cruise	Acc	Cruise	Acc	Cruise	Acc	Cruise	Acc	Cruise
+3	.001	.05	.005	.01	.01	.05	.25	.3	.5	.5
+2	.003	.1	.01	.02	.02	.1	.5	.6	1	1
+1	.005	.15	.02	.05	.03	.15	1	1	2	1.5
0	.01	.2	.03	.1	.05	.2	2	1.5	3	2
-1	.02	.3	.05	.15	.1	.3	3	2	4	3
-2	.03	.4	.1	.2	.15	.4	4	3	6	4
-3	.05	.5	.15	.3	.2	.6	6	4	8	6

Acc: Acceleration is measured in megameters per phase per phase (Mpp).
Cruise: Cruising speed is in AU per hour.

Fusion Torch (PL 6)

This drive consists of a continuous, controlled fusion explosion. Magnetic impellers channel the dangerous exhaust away from the ship, propelling it forward. A ship with a fusion torch drive can't use its fusion engines for travel to or from a planetary atmosphere, and it can't use its engines to make delicate docking maneuvers. Firing its drive destroys anything directly beneath or within a few kilometers of its engines. As a result, many ships equipped with fusion engines include planetary thrusters or rely on tug vessels. The fusion torch system can't be used within a planetary atmosphere.

Like each fusion generator, each fusion torch engine requires a fuel tank.

Ion Engine (PL 6)

More compact than the fusion torch, the ion engine breaks down molecules and expels the resulting ions with a magnetic impeller. An improvement over the crude strength of the fusion torch, it is also more expensive. Like each fusion generator, each ion engine requires a fuel tank.

Photon Sail (PL 6)

Stretching out photoresponsive wings to catch solar winds much like galleons of old caught earthly winds, a photon sail allows unpowered space travel using the power of a nearby star. The maneuverability and power of this engine system is determined by the number of sails employed and the distance to the nearest star.

You may adjust the ranges on TABLE G40: PHOTON SAILS if a ship is near especially large or small stars. Well-developed and colonized star systems may power photon sails along specific star lanes within a system. By following a laser beam projected from a planet or station over the course of a star lane, ships using photon sails travel at their best speed. This artificial method provides Amazing conditions, as noted on Table G40.

Individual ships may mimic this effect by using a laser cannon modified to a nondestructive power setting to apply continuous fire upon the photon sail of another ship. Each laser cannon must be fired at an individual sail unit. Each laser cannon directed at a sail upgrades its effec-

TABLE G40: PHOTON SAILS		
Distance From Star	Condition	Movement Points Generated
< 0.5 AU	Amazing	3/sail
0.5-5 AU	Good	2/sail
5-50 AU	Ordinary	1/sail
> 50 AU	Marginal	0*
* Sails may be powered artificially by lasers.		

tiveness by one category (Marginal to Ordinary, Ordinary to Good, etc.). For example, a photon sail powered by 2 laser cannons while operating more than 50 AU from a star is in Good conditions. A ship cannot power its own solar sails in this manner.

Planetary Thruster (PL 6)

Fusion torches and ion engines don't have the precision to be used in a planet's atmosphere, and actually landing with one of them is extremely hazardous. Ships of PL 6 that wish to land on planets must carry planetary thrusters, which include the ability to maneuver in atmosphere, and to leave the atmosphere for space. Usually, this is a scramjet or similar engine. Induction engines and inertial flux engines have no difficulty landing a ship on a planet, and don't require planetary thrusters.

One thruster is required per 10 durability points of the ship. Thrusters provide an ability to fly in planetary atmospheres at speeds up to 1,000 kilometers per hour. If a ship's planetary thrusters are used for its primary means of travel—typically out of desperation following the loss of normal engines—the acceleration is 0.001 Mpp and the cruising speed is 0.01 AU per hour.

Induction Engine (PL 7)

The induction engine creates an artificial slope in the fabric of space, similar to that caused by the existence of extreme masses. The ship then behaves like any other object in a gravity well—it falls. By varying the intensity and the direction of the artificial gravity well within the engine, the inducer can accelerate in any direction. Fortunately for nearby objects, the artificial gravity well is

extremely short-ranged, generally affecting only the vessel it moves.

The induction engine can be used to move a spacecraft within an atmosphere. In this case, the number of AU per hour the ship moves in space equates to a number of thousands of kilometers per hour. Suborbital approaches into space can travel faster.

Stabilizer (PL 7)

The stabilizer employs gravitonics in order to dampen the kinetic energy caused by violent maneuvers. It provides a -1 bonus to an operator's Vehicle Operation-space vehicle skill checks. One stabilizer unit is required per 20 points of durability of the ship; additional stabilizers might be necessary, but the bonus never improves beyond -1.

Inertial Flux Engine (PL 8)

Advancements in energy manipulation produce the inertial flux engine, a form of propulsion that derives its motive force from a sequence of quantum transformation waves rippling along a ship's hull. Through the conversion of subatomic probabilities, the waves alter the inertial state of the ship to suit the needs of the pilot.

Drive Systems

These are devices that make a ship capable of faster-than-light travel. Ships that don't possess these devices—and many don't—can attempt interstellar travel . . . but travel time will be measured in years or decades, not days or weeks. Drive systems can only be mounted in engineering compartments.

A ship equipped with a drive system is usually referred to as a *drive-ship*. Spaceships without drive systems are often called *systemships*.

TABLE G41: STARFALL DISTANCES

Durability	Power Factors			
	5	10+	—	—
1-10	10-15	20-25	30+	—
11-20	10-20	25-40	45+	—
21-30	15-30	35-45	50-75	80+
31-40	15-35	40-50	55-80	85+
41-50	20-40	45-55	60-85	90+
51-60				
Starfall (ly)	5	10	15	25

Stardrive-equipped ships make a starfall in 5 days (11^h hours).
 Drivewave-equipped ships make a starfall in 11 hours.

Other Drive Systems

The stardrive is the basic method of traveling between the stars in the *ALTERNITY* game. In your campaign, you may want to introduce other methods of traveling over interstellar—or even intergalactic—distances.

With any drive system, you need to consider the question of cost. How prevalent is FTL (faster-than-light) travel in your campaign? Next you need to decide how available the FTL technology is. It may be relatively small and easy to use—then use the statistics for the stardrive listed here. On the other hand, your drive system could require the energy of an exploding star to hurl a ship vast distances.

Direct FTL travel makes the assumption that Einstein's light-speed limit can be broken—perhaps under specific conditions or with special technologies. The chief problem here may be acceleration: How long does it take the FTL ship to build up velocity? Using conventional methods, it would take years or decades. . . .

Warp travel is an example of direct FTL that supposes the existence of a new technology of warp fields. Surrounded by such an energy field, ships can travel at speeds faster than light, but remain suspended within the normal "reality."

Hyperdrive offers a means to travel at high speeds through another dimension, known as "hyperspace." You have to determine the risks involved, the cost, and exactly how long it takes to travel: a light-year every day, every hour, or every minute! The faster the hyperdrive, the larger your campaign area becomes.

Wormholes differ widely from any of the previously mentioned technologies. In this campaign, anyone entering the wormhole is conducted instantaneously to a fixed location that may be hundreds or even thousands of light-years away. It's likely that wormholes aren't terribly common, and your starfaring campaign may be limited to only a few star systems. Special starship technology may be required to activate or survive the journey through a wormhole.

Jump gates are artificially created wormholes. Jump gates may provide transport to one single location, or a technology may exist to "tune" the departing jump gate to any receiving jump gate within a set distance. Again, the cost of jump gate technology and its use are entirely up to you. One advantage of jump gates is that no special technology may be required on the part of spaceships to use them.

No FTL? Humanity may never develop means of traveling faster than 300,000 kilometers per second. Maybe your SF campaign is limited to a single solar system, or maybe it takes place entirely on a gigantic generation ship, humanity's envoy to the universe.

For more discussion of FTL travel and its effect on your campaign, see *Chapter 14: Campaign Architecture*.

Stardrive [PL 7]

This device requires the presence and the immense energy output of a mass reactor. It is a modification to a mass reactor consisting of a special set of inversion coils and a tachyon injection system.

The stardrive itself isn't very large, only taking up 3 durability points, but it demands a huge amount of power that must be supplied by a mass reactor. Cross-reference the ship's total durability and its power factors to determine the number of light-years it can traverse in a starfall of five days. See *TABLE G41: STARFALL DISTANCES*.

◆ **Example:** Jack Everstar has constructed a trader-class driveship of 24 durability points. He purchases four mass reactor units to provide 20 power factors. In a single starfall, Everstar's ship can leap 5 light-years.

The mass reactor of a driveship is usually a lot larger than one for a systemship. Typically, a ship powers down all other systems before using its stardrive, so the power requirements for sensors, weapons, defenses, and even life support can be briefly ignored during the phase in which a driveship makes starfall. Following the phase in which the vessel enters drivespace, power can be redistributed. Ships with the power to run their engines and weapons and make starfall at the same time are unusual indeed.

Drivewave [PL 8]

This is an improvement of the stardrive. It relies on the same principles and requires a mass reactor, but it covers the vessel with a controlled energy field before entering drivespace. As a result, the drivewave-equipped ship completes a starfall in only 11 hours. Like the stardrive, it is a power hog that usually necessitates the shutdown of other systems on board. Cross-reference the ship's size in durability and its total power factors on *TABLE G41: STARFALL DISTANCES*.

Support Systems

The following systems consist of light machinery such as life support equipment or hydroponic facilities. They can be placed in auxiliary or engineering compartments.

One support system that's integral to all ships (included in the hull cost) is a means for reducing the stresses of acceleration. Ships of PL 6, experiencing stresses as high as ten times the force of gravity, must rely on adaptive couches, gelatin protection, and foam suits. At PL 7 and beyond, ships rely on methods that may disregard inertia, accelerating at thousands of times the force of gravity. These vessels can also use gravitics technology to provide a comfortable, standard gravity environment.

Life Support Unit (PL 6)

A life support unit consists of systems to regulate the ship's temperature, oxygen, and pressure, and reclamation machinery to filter and freshen air and water.

Each unit provides life support to one or more ship compartments whose durability totals 20 points or less.

All spaceships must have life support provided for crewed spaces, but a shipbuilder can economize by leaving certain compartments without life support. Compartments are either supplied with life support or not; it's up to the ship designer to assign life support to individual compartments. Cargo and weapons compartments can be left unprotected. Of course, if the crew ever needs to enter these areas, they must don e-suits unless the ship is docked in a hangar bay or other habitable environment.

Recycler Unit (PL 6)

Most ships rely on stored air, food, and water; over the course of a long voyage these perishables take up a lot of space. See the description for crew and passenger quarters, below. A recycler unit reduces the rate of a ship's stores consumption by a factor of four, thus increasing how long stores last. For example, a long-range escort with a recycler unit allows the crew quarters' typical 10-week stores to last 40 weeks. No benefit is gained from the use of more than one recycler unit.

Workshop (PL 6)

A machinery room filled with heavy equipment for repair work, manufacturing, or damage control, this system counts as a Good facility when using the Technical Science skill.



Coasting through the cosmos

Accumulator (PL 7)

This device is a large "battery" that stores power. Each accumulator stores 10 power factors, which can be used to run various systems if the ship's power plant is knocked out. A normal power plant continually generates power as it is being used. The power factors of the accumulator, however, don't automatically replenish every phase if used. For example, a ship whose engines require 2 power factors can maneuver for 5 phases on the stored power in its accumulator. Then the accumulator is empty and must be recharged by allotting power factors to it from a standard power plant such as a fusion generator or mass reactor.

Autosupport Unit (PL 7)

Each autosupport system provides life support to one or more compartments whose durability totals 20 points or less. An integral part of a ship hull, autosupport units consume no durability, but still must be assigned to an engineering or auxiliary compartment, since they have a standard chance of being damaged

or disabled. Compartments must be either completely supplied with life support or not at all. Autosupport units can be used in place of the standard life support units.

Sensor Systems

Sensors consist of sophisticated radar systems, infrared detectors, instantaneous mass detectors, and similar devices. The range of each sensor system is listed on TABLE G46: SPACESHIP DETECTION RANGE on page 156. Typically, sensors are located in the command compartment, although they may also be placed in electronics compartments.

Air/Space Radar (PL 6)

This is the standard radar system of the Fusion Age, suitable for atmospheric or space operation. The system is cheap and requires no durability points to install.

EM Detector (PL 6)

This is a passive antenna array for picking up electromagnetic signals. It detects radar and radio signals at long range, and is most useful

against targets using sensors of their own; if the target is using an active system, such as air/space, multi-band, or multiphase radar, the EM receiver confers a -2 bonus to the operator's System Operation-sensors check to detect the target.

The receiver can attempt to detect nonradiating targets by scanning for telltale drive emissions, radio chatter, and other incidental signatures. This is more difficult; using the passive system without an active target provides a +2 penalty on the System Operation-sensors checks.

IR Detector [PL 6]

The infrared detector searches for unusual heat signatures in the cold of space. It confers a -2 bonus to the operator's skill checks to detect ships maneuvering by means of a fusion torch or an ion engine.

Mass Detector [PL 7]

This sensor detects unusual or anomalous gravitational signatures. Its selective computerized buffers screen out all extraneous gravity effects from the vicinity, zeroing in on masses that are moving or that don't match stored information concerning the target area.

Multiband Radar [PL 7]

This is a more powerful version of air/space radar, with greater frequency agility. It automatically shifts from slow, long-range scans to rapid, short-range locks as a target closes.

Remote Network [PL 7]

A ship with a remote network carries a number of sensor probes that can be deployed in a constellation thousands of kilometers in diameter. This greatly enhances the range and discrimination of all onboard sensors. The net effect is a doubling of all ranges listed on TABLE G46: SPACESHIP DETECTION RANGE.

The network of probes travels parallel to the ship, conferring benefits until the ship changes course or speed. The 2 durability points the system occupies allow for six uses of the network. Generally, if a ship changes course the remotes are lost. The remotes stay active for one day before their batteries need recharging. Each additional durability point assigned to this system allows three additional uses of the remote probe network to be stored on board; each use costs \$20K.

Spectroanalyzer [PL 7]

This powerful analytic tool uses spectrum analysis of visible light, measured mass signatures, radar mapping, and laser rangefinding to find out almost everything there is to know about a planet or object. From anywhere in a solar system, a sensor operator can make a System Operation-sensors check; success provides the operator with a planet's orbital characteristics, environment class, and environmental conditions.

CE Passive Array [PL 8]

This system operates through computer-enhanced (CE) observation of all electromagnetic energy impinging on the sensor. Visible light, electronic signals, heat, and high-band radiation emitted by the target are all analyzed and compared automatically.

Multiphase Radar [PL 8]

The next step in the evolution of radar technology, a multiphase array consists of a simultaneous electronically scanned radar sweep in multiple spectrums. Its built-in computer banks compare scans across the bandwidths.

TABLE G42: SPACESHIP ARMOR

Armor Type	PL	LI	HI	En	Avail	Cost per 10 durability
<hr/> <i>Light Armor</i> <hr/>						
Polymeric	6	d4-1	d4-1	d4-2	Com	50K
Alloy	6	d6-1	d6-1	d4-1	Con	75K
Cerametal	7	d6-1	d6-1	d6-1	Mil	100K
Neutronite	7	d6	d6	d6-1	Mil	250K
Nanofluidic	8	d8-1	d8-1	d8	Res	500K
<hr/> <i>Moderate Armor</i> <hr/>						
Polymeric	6	d4	d4	d4-1	Com	100K
Alloy	6	d4+1	d4+1	d4	Con	150K
Cerametal	7	d4+1	d4+1	d4+1	Mil	200K
Neutronite	7	d6+1	d6+1	d6	Mil	500K
Nanofluidic	8	2d4	2d4	2d4	Res	1M
<hr/> <i>Heavy Armor</i> <hr/>						
Polymeric	6	d4+1	d4+1	d6-1	Com	200K
Alloy	6	d6+1	d6+1	d6	Con	300K
Cerametal	7	d8	d8	d8	Mil	400K
Neutronite	7	d8+1	d8+1	d8+1	Mil	1M
Nanofluidic	8	2d4+1	2d4+2	2d4+1	Res	2M

Defense Systems

Powerful jammers, countermeasures, point-defense guns, gravity fields, and energy shields can all be fitted to a ship to protect it from enemy fire. Heavy armor, automated damage control, and redundancy are used to protect vital components.

Defense systems may be installed in command, electronics, or weapons compartments.

Armor (PL 6-8)

Armor allows a spaceship to make an armor roll when it is struck and damaged. The cost of the armor depends on three factors: the size of the spaceship (reflected in its total durability), the type of armor, and the amount of armor. See TABLE G42: SPACESHIP ARMOR. Armor is mounted over the entirety of the ship, not on a single compartment.

Alloy armor consists of large quantities of super-tough metal alloys such as vanadium steel. Polymeric armor is composed of microengineered plastics. Cerametal is made from laminated ceramics and lightweight metals. Neutronite armor is an alloy composed of compressed tungsten and disassociated neutrons. Nanofluidic armor is a system of smart, liquid metals with extraordinary conductivity and memory characteristics.

A spaceship designer first selects the type of armor and then the amount of armor—light, moderate, or heavy. The armor's cost is found by cross-referencing this decision with the spaceship's total durability.

Armor may also have a durability cost, determined by the amount of armor selected. Light armor, regardless of the type, has no durability cost. Moderate armor costs 10% of the total durability of the ship (round down to the nearest whole number). Heavy armor costs 20% of the total ship durability (round down to the nearest whole number). This durability cost is subtracted from the ship's total durability rather than from an individual compartment.

◆ **Example:** Dave is designing a trader-class spaceship with a total durability rating of 24. He decides to purchase moderate alloy armor. The monetary cost is \$450K (\$150K for each 10 durability points or portion thereof). The durability cost is 2. (Ten percent of 24, rounded down, is 2.)



Fusion Age jet fighter

Chaff (PL 6)

Chaff consists of millions of tiny strips of metallic fiber. It interferes with active sensors and missile seekers. Launchers positioned on the ship can instantly create a cloud of chaff particles in any threat sector. The defense system operator makes a System Operation—defenses skill check when deploying chaff. A successful result supplies the enemy's missile attack or sensor check with a +1 penalty.

Damage Control (PL 6)

When a spaceship compartment suffers excessive stun, wound, or mortal damage, the compartment may be required to make durability checks. See "Damage" later in this chapter. Damage control systems provide a bonus to durability checks.

Damage control systems come in three types: Ordinary, Good, and Amazing. Each system requires 1 durability of space, 1 power factor, and protects a number of compartments whose total durability is 20 or less. Depending on the system's quality, a damage control system provides a -1, -2, or -3 bonus to durability checks in the compartments it covers. The cost is \$50K/\$200K/\$500K per system, respectively.

Jammer (PL 6)

Also known as ECM, or electronic countermeasures, a jammer system radiates confusing interference in the bandwidths commonly used for fire control and missile guidance. It's an active system typically controlled by the communications officer. The officer makes a System Operation—communications skill check when jamming. The result of the check determines the modifier to the enemy's sensor checks, communication

checks, and missile attacks for the next round: Critical Failure, -2 bonus; Failure, no modifier; Ordinary, +1 penalty; Good, +2 penalty; Amazing, +3 penalty.

At PL 7, a jammer has the ability to scramble gravimetric frequencies, disturbing the use of mass detectors and mass transceivers. Modifiers are cumulative with any others that apply, including other defenses.

Point-Defense Gun (PL 6)

This is an automated missile defense system that uses a barrage of slugs, laser bursts, or maser bolts to destroy incoming missiles before they detonate. It can fire in all directions around a ship. If the user makes a successful System Operation—defenses skill check, one incoming missile is destroyed before impact.

If the point-defense gun is used as a weapon, it has combat statistics equivalent to a laser cannon, but it does high impact (HI) damage.

Deflection Inducer (PL 7)

This inducer creates belts of gravitational force to deflect physical projectiles and bend beam weapons away from a ship. The inducer may provide a modifier to an attacker's skill check depending on the result of a System Operation—defenses skill check: Critical Failure, -2 bonus; Failure, no modifier; Ordinary, +1 penalty; Good, +2 penalty; Amazing, +3 penalty. These penalties are doubled against attacks from non-spaceship weapons.

Each deflection system protects an area of 20 durability points. Without full coverage, a deflection inducer provides no benefits.

TABLE G43: SHIPBOARD COMPUTER SYSTEMS

System	Cost			Durability		
	O	G	A	O	G	A
Computer Core	50K	100K	500K	1	2	3
Dedicated Systems:						
Battle	50K	100K	500K	0	0	0
Communications	10K	50K	100K	0	0	0
Defense	25K	50K	250K	0	0	0
Engineering	25K	50K	250K	0	0	0
Navigation	10K	25K	100K	0	0	0
Science	10K	25K	100K	0	0	0
Sensors	10K	25K	100K	0	0	0

Ablative Shield (PL 8)

This defensive measure envelops its ship with a field of energy. Quantum particles absorb and dissipate attacks by massing as virtual matter. In each phase, the ship's engineer devotes a number of power factors to the unit (or units). Every point of mortal damage reduces the field by 3 points; every point of wound damage reduces the field by 2 points; every point of stun damage reduces the field by 1 point. Primary damage absorbed in this fashion does not cause secondary damage.

Displacer (PL 8)

A refinement of the inertial flux engine unit, the displacer calculates a sequence of safe engine slides. When triggered, the ship executes a slide, moving a few hundred meters. The displacer may provide a modifier to an attacker's skill check depending on the result of a System Operation—defenses skill check: Critical Failure, -1 bonus; Marginal, +1 penalty; Ordinary, +2 penalty; Good, +3 penalty; Amazing, +4 penalty.

Communication Systems

Comm systems take up little space, and can be located in either command or electronics compartments.

Laser Transceiver (PL 6)

The laser transceiver uses an energy beam in the visual frequency range to transmit messages. While limited to the speed of light, the laser transceiver's advantage is that it is somewhat more difficult to jam, providing a +2 penalty to enemy attempts.

Radio Transceiver (PL 6)

The radio transceiver is a standard method of cheap communication. Unfortunately, it is limited to the speed of light—about 8 AU per hour, or 300,000 kilometers per second. In a tactical situation, that speed is practically instantaneous; for strategic purposes, messages can take hours, days, or even longer to travel.

Mass Transceiver (PL 7)

The mass transceiver uses criss-crossing gravity lines within a star system to transport messages in the form of cohesive graviton packets. The mass transceiver allows for instantaneous communication within a star system—but it can't be used in interstellar space.

Computer Systems

Spaceship computer systems use most of the rules from Chapter 10: Computers in the *Player's Handbook*. Ship computers possess active memory equal to a mainframe at their own Progress Level.

A ship's computer core can perform any computer functions, and most PL 7 ships take advantage of this by adding AI programs, including AI programs with autopilot functions.

Computer systems can be installed in command or electronics compartments. Like all networked ship systems, the computer can be controlled from a station in its compartment, or from the command deck.

Computer Core (PL 6)

All spaceships automatically include a Marginal computer core in the ship's command compartment, at no durability cost. It monitors all ship systems, operates automated functions, and allows the crew to interact with the ship and control the various systems from the command deck.

Purchasing a computer core of better quality gives multiple benefits. First, it provides more active memory, just like a normal computer. Also, a ship with a computer core of Ordinary or better quality can add dedicated computer systems. See TABLE G43: SHIPBOARD COMPUTER SYSTEMS.

Ship computers at PL 6 are limited to Ordinary quality. At PL 7, computers of Good and Amazing quality are available—but these computers cost more and take up more durability. It is possible to include more than one computer core in a ship, given adequate financing and durability.

Dedicated Computer Systems

Dedicated computer systems enhance the abilities of system operators, providing a bonus depending on their quality. Ordinary dedicated systems provide a -1 skill bonus but require an Ordinary computer core; Good dedicated systems provide a -2 bonus but require a Good computer core; Amazing dedicated systems provide a -3 bonus but require an Amazing computer core.

The exact skill enhanced depends on the dedicated computer system:

Battle computers amplify the accuracy and power of weapon systems, providing a bonus to the operator's System Operation—weapons skill checks.

Communications computers assist the reception, transmission, and jamming of communication signals, providing a bonus to the operator's System Operation—communications skill checks.

Defense computers improve the response and effectiveness of active defense systems, providing a bonus to the operator's System Operation—defenses skill checks.

Engineering computers improve shipboard monitoring and power mechanics, providing a bonus to the operator's System Operation—engineering skill.

Navigation computers assist in the calculation and ease of plotting courses through space or drivespace, providing a bonus to the operator's Navigation-system astrogation and drivespace astrogation skill checks.

Science computers appear in multiple formats (Life, Medical, Physical, and Technical) and assist the analysis and manipulation of a single science broad skill and its specialty skills. The computer provides a bonus to one of the following broad skills: Life Science, Medical Science, Physical Science, or Technical Science.

Sensor computers enhance the sensitivity and analytical capabilities of sensor systems, providing a bonus to the operator's System Operation-sensors skill checks.

Crew Systems

These are systems or facilities designed for use by the ship's crew. Crew systems may be added to crew or command compartments.

Crew Quarters (PL 6)

Crew quarters include basic quarters and mess facilities. Each durability point allotted to crew quarters allows the ship to quarter six persons with private bunks, mess facilities, washrooms, and lounges. Truly spartan quarters, with rotating bunks and little more, can uncomfortably accommodate ten people with each durability point.

It's worth noting that space may exist to cram dozens or possibly even hundreds of people aboard a ship for a brief time. Crew quarters and passenger suites make it possible to *live* on the ship.

Each unit of crew quarters automatically includes a supply of ship stores—food, air, and water—for its occupants that will last a total of 10 weeks. An additional 20 weeks of ship stores costs \$5,000 and 1 durability point per crew quarters.

Lab Section (PL 6)

A lab section includes a small suite of offices, laboratories, conference rooms for up to four technicians, and an Ordinary quality science computer (see "Computer Systems," above) designed to support extensive research and experimentation. The section includes databases on most scientific fields, plus instrumentation and recording devices. Many survey



Drive relay

or exploration ships carry a lab section in order to analyze and record their findings.

Passenger Suite (PL 6)

Many ships are equipped to carry passengers in relative luxury. A passenger suite consists of a first-class stateroom, a lounge and dining room, and a high-quality galley. Each durability point assigned accommodates two passengers in excellent quarters or four passengers in moderate comfort.

The purchase of a passenger suite automatically includes a supply of ship stores—food, air, and water—for its occupants that will last a total of 10 weeks. Additional 20-week stores cost \$5,000 and 1 durability point per passenger suite.

Optionally, for 1 durability point, rows of seats can be constructed for up to twenty people. This tight seating isn't comfortable, but it's handy for transporting a large number of people over short distances.

Heroes who sell passage on their starship should consider hiring an extra crewman or two to cook, clean, and look after the passengers—most people expect first-rate service for their money.

Sick Bay (PL 6)

This is a comprehensive care and treatment facility with operating areas, scanning equipment, a built-in medical computer and database, and recovery rooms for up to four patients. Larger sick bays can accommodate an additional four patients per additional durability point assigned. At PL 6, the sick bay provides a -2 bonus to a Medical Science skill check. At PL 7, this bonus improves to -3.

Cargo Systems

These are storage facilities of one kind or another. Cargo systems can only be put in cargo compartments.

Cargo Space (PL 6)

Each durability point assigned to cargo space provides 24 cubic meters of storage space—an area 2 meters high, 3 meters wide, and 4 meters deep. Cargo must be loaded and unloaded manually, using a forklift or similar gear.

Fuel Tank (PL 6)

Ships relying on fusion generators or grav-fusion cells for power, or fusion torches or ion engines for thrust, must carry a large volume of hydrogen as fuel. For each of these units that a ship possesses, it must also carry one fuel tank. For example, a ship with three fusion generators (6 durability points) also needs a 3-point fuel tank.

A fuel tank, using this standard ratio, contains enough fuel to provide 10 weeks of continuous operation for one of these units. Less than full tanks or additional tanks alter this duration accordingly.

Hangar (PL 6)

Hangars act as vehicle storage, launch, and recovery facilities. Each hangar's capacity varies—for each durability point assigned to hangar space, the hangar can carry 1 durability point worth of space vehicles, or 2 durability points of standard vehicles such as cars or jets. For example, a hangar with a durability of 10 can carry two skycars and a semi truck, or even a small spacecraft such as a launch or a fighter.

The hangar bay includes facilities for engine repair, fueling, and other common maintenance tasks. With the advent of energy field technology at PL 8, a hangar bay can launch and recover vehicles without opening its atmosphere to space.

Autocargo (PL 7)

The autocargo unit features standard cargo space fitted with powered handling gear and access hatches for rapid loading and unloading. Container systems and ro-ro (roll on, roll off) cargo facilities fall into this category. The autocargo unit requires power only during loading and unloading.

TABLE G44: SPACESHIP WEAPONS

Weapon	Avail	Cost	Dur	Pow	Acc	Range	Type	Damage	Actions
Progress Level 6: Fusion Age									
Laser cannon	Con	100K	2	2	0	1/2/3	En (e)	d4s/d4w/d4+2w	4
IR laser	Mil	250K	3	2	0	2/4/6	En (e)	d4+1s/d4+1w/d6+1w	4
Launch rack	Con	50K	2	1	0			As load	2
Launch tube	Mil	100K	3	1	0			As load	1
Missile, ARN	Mil	100K	0	0	-1	10/20/30	Li (g)	d8s/2d4+1s/d4+2w	0
Missile, CHE	Con	50K	0	0	+1	8/16/24	Li (g)	d8s/d6+1w/d4+1m	0
Missile, NUK	Res	500K	0	0	-2	10/20/30	En (g)	2d6s/2d6w/2d6m	0
Missile, SMP	Mil	100K	0	0	-1	18/16/24	Hi (g)	d6+2s/d6+2w/d6+4w	0
Rail cannon	Res	500K	4	3	+1	4/8/12	Hi (p)	2d4s/d6+2w/d4+1m	2
Turret	Com	100K	1	0	0			As weapon	
X-ray laser	Mil	350K	3	2	0	3/6/9	En (e)	d6+1s/d4+2w/d4m	4
Progress Level 7: Gravity Age									
Mass cannon	Con	300K	2	3	0	5/10/15	Li (p)	d6+2s/d6+1w/d6+3w	3
Mass converter	Res	1 M	4	6	0	3/6/9	En (e)	d6+3s/d6+3w/d6+2m	2
Matter torpedo	Res	600K	5	4	+1	2/5/10	En (e)	2d6s/2d6w/d6+3m	2
Missile, MRB	Res	200K	0	0	-1	10/20/30	En (g)	2d4+1s/2d4w/d8+1m	0
Particle beam	Res	500K	4	5	0	6/12/18	En (e)	d6+3s/d4+1m/d4+3m	2
Plasma cannon	Mil	400K	3	3	0	4/8/16	En (e)	d6+2w/d8+2w/d6+1m	3
Tractor beam	Con	500K	2	*	-1	3/6/9	En (e)	See description	2
Progress Level 8: Energy Age									
EM torpedo	Res	450K	3	1	0	3/6/15	En (g)	d6+3s/2d8s/d4+2w	2
Kinetic lance	Mil	750K	2	1	0	5/10/20	Hi (e)	d4+1w/2d4w/d4+3m	3
Maser cannon	Con	400K	4	3	-1	6/12/20	En (e)	d6+2w/d4+1m/d6+2m	4

Weapons Systems

All weapons are installed facing in one of four directions—forward, port, starboard, or aft. (Since the visual combat system works on a flat plane, up and down aren't considered.) In order to increase a weapon's arc of fire, it must be installed in a turret. Otherwise, the weapon is hard-mounted on the ship facing in the stated direction.

Since missile systems are guided, it's not necessary to use a turret or determine the missile system's arc.

Laser Cannon (PL 6)

The most basic weapon system available, a laser uses power to excite a fluorescent medium, and then directs the light created in a powerful beam.

IR Laser (PL 6)

An improvement of the standard laser cannon, an infrared laser operates at low wavelengths and tends to transfer more heat, with less cut-

ting power, than a standard laser. Its invisible beam is more coherent than a laser cannon's emission, has a longer range, and can deliver more energy to the target.

Launch Rack (PL 6)

The launch rack is a one-shot storage and firing facility for missiles. It is a box or bundle of missile canisters mounted externally on the ship hull. The rack carries eight missiles. The weapon's damage, range, and accuracy are determined by the type of missiles carried. Consider missiles to attack in the same phase in which they're fired, with no maneuvering or guidance required.

Missile racks can't be reloaded during combat, and there's no way to change the selection of missiles in a hurry. Reloading can only be done in a port, or through extravehicular activity. Missiles must be purchased separately from the launch rack.

Launch Tube (PL 6)

This is a missile storage and firing system that consists of a magazine

and a launch rail. The basic system takes up 3 durability points and holds a magazine of up to ten missiles; each additional durability point assigned costs \$50K and adds a capacity for five more missiles. For example, a 5-point launch tube system can hold up to twenty missiles. Like the launch rack, the combat characteristics of the system depend on the missiles carried. Unlike the launch rack, the launch tube can be loaded as desired during combat. Missiles must be purchased separately.

Missile, ARN (PL 6)

The antiradiation missile homes in on enemy radar or jamming transmissions. Ignore any penalties caused by enemy jamming; instead, antiradiation missiles gain a -2 bonus to attack ships using jammers or radar.

Missile, CHE (PL 6)

This conventional, high-explosive missile features a smart warhead with directional blast and fragmen-

How to Read the Weapons Table

Here are brief descriptions of what the column headings on TABLE G44: SPACESHIP WEAPONS mean.

Weapon: The common name of the weapon.

Avail: Some vehicle systems are not available to just anyone with a little cash, especially weapons. See "How to Read the Weapons Tables" in Chapter 11: Weapons & Armor in the *Player's Handbook*.

Cost: The average cost of the weapon.

Dur: The number of durability points the system uses within a ship compartment. A compartment can carry a number of durability points worth of systems equal to its mortal rating.

Pow: The number of power factors the system uses.

Acc: Accuracy, an optional rule. A number other than 0 indicates that a bonus or a penalty is applied to the operator's skill check.

Range: The weapon's range, expressed as a series of numbers. The numbers represent short/medium/long range in megameters.

Type: The first entry under type describes the form of damage the weapon inflicts: low impact (LI), high impact (HI), or energy (En). The form of damage determines the effectiveness of the weapon against a particular kind of armor. The second entry describes the weapon's class: energy (e), guided (g), or projectile (p). The class determines the modifiers due to the weapon's range (see "Spaceship Attack Modifiers"). All shipboard weapons have Amazing firepower.

Damage: The amount of damage a weapon inflicts when used in the proper manner. Figures are given in Ordinary/Good/Amazing order, and the appropriate damage is applied depending on the result of the weapon operator's skill check.

Actions: An optional rule. The number defines the number of times a weapon can be used in a single round.

other of particles, causing an uncontrolled corrosive reaction of severe effect. In addition, the mass converter ignores the effect of a deflection inducer.

Matter Torpedo (PL 7)

The matter torpedo is a charged warhead that creates a massive implosion on impact. A simple accelerator, included in the system's cost, is used to throw the warhead at its target. Although the torpedo has a relatively short range, its damage potential is extraordinary.

Missile, MRB (PL 7)

The socially acceptable version of the nuke is the mass-reaction burst warhead. The device forces the abrupt decay of a small amount of dark matter, resulting in a powerful blast of light, heat, and short-lived radiation.

Particle Beam (PL 7)

This device is a linear accelerator that fires blasts of atomic particles. Most use protons or neutrons, since these heavy particles tend to inflict more damage to the target.

Plasma Cannon (PL 7)

This weapon converts an electrochemical mixture into white-hot plasma and then uses a magnetic accelerator to throw a jet or blast of the plasma at the target. The superheated plasma mixture explosively vaporizes when it hits a target.

Tractor Beam (PL 7)

An application of gravitic technology, the tractor beam allows vessels to manipulate—by attracting or repelling—objects outside their hull. For every 3 power factors devoted to the tractor beam, an acceleration of 0.25 Mpp can be applied to a target.

Use of the tractor beam requires a successful System Operation-weapons skill check. Unless the target's ability to accelerate is effectively countered, the target can escape from the tractor beam with a Moderate maneuver. No vessel can apply a tractor beam to a ship with greater durability than its own.

EM Torpedo (PL 8)

This weapon utilizes a specialized electromagnetic-pulse warhead powered by a fusion reaction. It's useful for incapacitating enemy ships without destroying them.

Turret (PL 6)

Mounting a weapon in a turret allows it to fire into three of the four arcs of fire, instead of just one. Turrets always have a "blind spot" of at least one arc. The ship designer can select which arcs each turret faces.

Mounting a weapon in a turret adds to the weapon's durability and cost. Since the turret's machinery and support systems take up space, it is bulkier than an equivalent hand-mounted weapon.

X-Ray Laser (PL 6)

This nasty device uses a laser process to create and direct a focused beam of high-energy x-rays. It causes more damage than the standard laser or IR cannon.

Mass Cannon (PL 7)

A larger and more powerful version of the hand-held mass weapons, a mass cannon fires a ripple of intense gravity waves, striking its target like a massive physical blow.

Mass Converter (PL 7)

This unusual device manipulates the nature of matter at a distance. It forces the target's atoms to strip each

other of particles, causing an uncontrolled corrosive reaction of significant damage.

Missile, NUK (PL 6)

Nuclear devices are under strict control in most societies, even in the far future. The nuclear missile gains an accuracy bonus because it doesn't have to hit dead on; getting within a dozen kilometers can do the job.

Missile, SMP (PL 6)

The submunition pack missile carries a bundle of depleted uranium or neutronite penetrators that deploy in a broad area. Due to the extremely high velocities involved, each penetrator strikes with an immense amount of kinetic energy.

Rail Cannon (PL 6)

The rail cannon is an electromagnetic accelerator that fires projectiles at high velocities. The cannon typically releases projectiles in groups in order to create a shotgun effect on the target. Compared to other weapons of the era, the rail cannon is power-hungry and inaccurate, but it can be deadly at close ranges.

Kinetic Lance (PL 8)

A modification of the ablative shield technology, a kinetic lance creates a spear of virtual particles that simulate solid matter. It can punch or batter holes through solid neutronite, since the kinetic lance can imitate degenerate stellar matter.

Maser Cannon (PL 8)

The maser cannon creates blasts of electromagnetic energy—light, heat, and radiation—with a linear antenna array. It combines accuracy, armor penetration, and hitting power.

The Ship Design Record Form

A ship has its own vital statistics that describe how well it moves, fights, and withstands damage. These statistics are recorded on the Ship Design Record Form on page 252. The most important entries on this form are described below.

► **Maneuver rating:** This is the number determined from TABLE G38: SHIP MANEUVERABILITY. It provides a modifier to all Vehicle Operation checks during maneuvers.

► **Acceleration and Cruising speed:** A spaceship's acceleration and cruising speed can be determined from TABLE G39: SHIP ACCELERATION & CRUISING SPEED.

► **Weapons:** Write down the name and the vital stats for any weapon systems the ship carries, including the weapon's accuracy, range, damage type, damage amount, and max actions per round, and any special notes. Indicate which way each weapon faces by marking the appropriate section of the small crosshair diagram (forward = top section, aft = bottom, starboard = right, or port = left).

► **Armor and Defenses:** Record the ship's armor type and the armor's values against low impact (LI), high impact (HI), and energy (En) weapons. Write down any defensive systems the ship carries, including their power requirements.

► **Engines:** Record the type and size of the engines, along with the number of power factors converted to movement points.

► **Power plant:** Note how many power factors are generated by the ship's reactors.

► **Sensors:** Use this space to record the ship's sensor systems, in-

cluding the system's range and power requirements.

► **Communications:** Use this space to record the ship's communication systems, including the system's range and power requirements.

► **Computer:** Record the computer's quality and characteristics here.

The Ship Status Record Form

As well as a place for recording the basic facts about what a ship contains, you need a way to keep track of who's running the various systems and how the ship is faring in combat. The Ship Status Record Form, on page 253, serves this purpose. It contains two sections:

Command Crew

In the top section of the form, jot down the compartment where each station and system is located, along with the name of the character who's operating each station and his or her relevant skill scores. For example, a hero manning the ship's weapons station would note her System Operation-weapons skill score.

Damage Diagrams

Most of the Ship Status Record Sheet is taken up by damage diagrams—enough to describe a ship of as many as 12 compartments. On the line following a compartment's number, write in the function of that compartment (command, crew, cargo, etc.).

The durability rating of a compartment goes into the circle next to the "M" (since this number also represents the compartment's mortal points). Next to the "S" and the "W," write in twice the compartment's

mortal rating, representing the compartment's stun and wound points.

Working from right to left on each line of boxes, blacken the boxes that won't be needed to keep track of that compartment's damage, leaving open a number of boxes equal to the the number to the left of the first box. When a ship is struck by enemy fire, record damage in these open boxes to show the current status of each compartment.

Stack Versions of Common Spaceships

When your hero first purchases or acquires a starship, it's likely that he begins with a stock, unmodified model of that type. These vessels begin with predesignated systems, which can then be modified or replaced by the hero at some later date. In some cases, the hero may be able to buy (or salvage) an extensively customized vessel, but there should be a backstory or adventure associated with the acquisition.

Stock vessels are described in *Chapter 12: Vehicles* in the *Player's Handbook*.

Customizing Spacecraft

Customizing a ship involves upgrading, replacing, or adding new systems to improve its capabilities. For example, a light freighter rigged for fighting can easily defeat a stock light freighter. All the hero needs is money, time, and access to a facility that can do the work he wants done. Of course, the availability of certain systems—especially weapon systems—is something to consider as well.

Combat at Extreme Velocities

In order to get into a space battle, one ship must close and match the other vessel's approximate course and speed. Ships of PL 7 are capable of travelling in normal space at 40% to 50% of the speed of light. When a ship wants to bring a fast-moving enemy to battle, it has two choices: First, it can just wait where the enemy must slow down, like its destination or departure point; second, it can attempt to match course and speed so that even though they're both traveling at extremely high speeds, they're not moving very fast relative to each other. For simplicity, assume that matching courses requires the pursuer to be at least as fast as the fleeing vessel and takes time—d6 hours is a reasonable figure for catching a ship that doesn't take extreme evasive maneuvers.

If a ship wants to avoid contact altogether, it can usually do so, but it might be forced to turn away from its intended destination.

Removing Old Systems

The first step in customizing a ship is getting rid of old systems. Any system may be removed, but some are harder to replace than others:

System	Removal Cost	Time
Cargo	50%	1 wk/dur
Comm	10%	1 wk/dur
Computer	10%	4 wk/dur
Crew	10%	1 wk/dur
Defense	10%	2 wk/dur
Drive	50%	8 wk/dur
Engine	50%	6 wk/dur
Power	25%	4 wk/dur
Sensor	10%	4 wk/dur
Support	25%	2 wk/dur
Weapon	10%	2 wk/dur

Removal Cost is what it costs to strip a system from a compartment, expressed as a percentage of the original cost of the old system. The cost of installing a new system is included in the cost of the new system.

Time is how long it takes to either remove or install a system of the listed type, expressed in weeks per durability point of the system. Systems without a durability cost take 1 week to install. Empty or unused compartments don't need to be removed before a new system can be installed. The time requirement assumes that the overhaul is performed in a complete repair facility.

Systems removed from a ship may be resold at 10% to 80% ($d8 \times 10$) of their original purchase price, provided someone is interested in buying the used equipment. Badly damaged or wrecked systems may be worthless, suitable only for scrap valued at 2% to 12% ($2d6$) of original price.

Adding New Systems

To install a new system in a spacecraft, a hero must first find a place where the system can be purchased and then find a facility that can install it. In many cases, these are one and the same, but sometimes a ship captain may be able to salvage a system from a wrecked ship and still need to find someone to install it.

Remember, the cost of installation is included in the system's base cost. If the hero is going to do the installation work, knock 20% off the cost of purchase. On the other hand, if the hero owns an intact system but needs someone to put it in, use the removal cost described above.

Measurements

A megameter (Mm) is equal to 1,000 kilometers. A ship traveling at 6 megameters per phase (Mpp) is traveling at a speed of 6,000 kilometers per phase, or 6 million kilometers per hour.

In the visual combat system, it's easiest to set a PL 6 combat scene at 0.1 Mm (100 km) per hex, and a PL 7 combat scene at 1 Mm per hex.

Some useful conversions to remember:

1 megameter (Mm) = 1,000 kilometers (km)

1 AU = 150 million km = 150,000 Mm

150 million kph = 1 AU per hour = 0.15c

1,000 kph = 1 kilometer per phase

1 million kph = 1 megameter per phase

SPACESHIP MOVEMENT

There are four frames of reference for spacecraft movement—*interstellar*, *interplanetary*, *orbital*, and *combat*.

Interstellar Movement

In a starfaring campaign, a sector map shows the region of space in which spaceships move strategically. See *Chapter 14: Campaign Architecture* for information on how to build campaigns and design sector maps for your setting.

Vessels of Progress Level 6, the Fusion Age, are not capable of faster-than-light travel. This means that travel times between stars are measured in years or decades, not weeks or months. For the purposes of running a game in such a setting, you can assume that the heroes spend their time in cold sleep. Movement from star to star happens between adventures in this type of game, since the heroes won't have many decisions to make while they're waiting to get to the next star system.

The Stardrive

The stardrive propulsion system is a feature of Progress Level 7 technology, and is considered the baseline for interstellar travel in the *ALTERNITY* game system. The device allows a ship to span vast distances during a 5-day submergence in drivespace. During this period, the vessel exists in a featureless void, unable to interact with the rest of the universe. Its destination is fixed upon entrance, and it can't leave drivespace until the 5-day period has elapsed.

A driveship cannot reenter drivespace immediately after making starfall; it needs to accumulate a tachyonic charge that is dissipated during each submergence. Tachyons naturally dissipate in drivespace and therefore can't be stored. Thus, a long interstellar voyage on board a driveship consists of a series of 5-day starfalls through the emptiness of drivespace, interspersed with a few days in real space.

The exact recharge time is random. In game terms, you can determine the exact time of recharge by one of three means. You can simply roll $d4$ and add 1 for a number of days. Or, for a more precise measurement, roll $7d12+36$ for a number of hours. Finally, you may allow an engineer to attempt to decrease the time by analysis of tachyonic density and plotting of ship movement. Allow the hero to make a System Operation—engineering skill check. The result reduces the recharge time: Ordinary, $6d12+36$ hours, Good, $5d12+36$ hours, Amazing $4d12+36$ hours. (As a rank benefit, allow a hero with 4 or more ranks in engineering to reduce the roll by an additional $d12$.)

The nature of the cycle time and the submergence into drivespace means that all ships have the same travel time for jumps of 5 light-years or less—5 days. Stardrives powered by larger mass reactors show their advantage in the long haul. A small ship has to make five or ten jumps to cover 50 light-years, each requiring 5 days plus several days of downtime, to cover the distance a huge ship can cover in one submergence.

Ships of Progress Level 8 or higher may use alternate propulsion systems even more astounding than the stardrive. The drivewave described earlier in this chapter is an example.

Interplanetary Movement

Interplanetary travel, while expensive and slow, is within the reach of technologies available in the late twentieth century. Travel within a star system may be the limit of the technology available to heroes, or it may be the medium between a planet's surface and the great gap between the stars.

A ship moving between planets isn't just sailing the seas from one port to another. It's really in another orbit—around the star. The spacecraft of the Fusion Age (PL 6) have enough power to continuously alter this orbit, driving along an intercept course to the intended destination.

For game purposes, ships fly through planetary systems just as airplanes cross continents, ignoring the complex astrogation and looping intercept orbits that are required to reach another planet. Given this assumption, the best way to deal with spacecraft moving in interplanetary space is to consider their cruising speed in AU per hour.

One astronomical unit is 150 million kilometers—the distance from the Earth to the Sun. Most inner-system journeys require spacecraft to travel anywhere from 1 to 10 AU.

For simplicity, use the cruising speed determined for a spaceship when determining how long it takes to travel within a system. Realistically, of course, the only limit on a conventional engine speed, given sufficient time to accelerate, is the speed of light. During its trip, the ship accelerates past its cruising speed, but halfway through the trip it must decelerate. A ship's cruising speed is actually its average speed for the duration of the trip.

TABLE 645: SPACESHIP OPENING RANGE

Prevailing Condition	PL 6 Range	PL 7+ Range
Hazardous	3d6 × 0.1	d6
Crowded	6d6 × 0.1	3d6
Normal	6d6+20 × 0.1	6d6
Clear	3d6	6d6+20

All measurements are in megameters (Mm).

Progress Level 6 ships average a cruising speed of 0.1 AU per hour. In the Fusion Age, acceleration is tough. Even with viscous-fluid tanks, drugs, and other countermeasures, humans can't tolerate more than about 30 g.

The use of artificial gravity to counter the effects of acceleration allows ships of PL 7 to accelerate at astonishing rates. Most PL 7 ships can change their speed by about 1 million kph (or 1 megameter per phase) with each phase of acceleration. Such acceleration allows them to reach much higher speeds in reasonable time. The faster Gravity Age ships cruise at about 1 AU per hour or 0.15c (light speed).

Here are some guidelines for determining the travel time between two points in a system:

PL	Average Speed	Roll
5	1/3 months	10d12 months
6	1/10 hours	d20 days
7	1/hour	3d12 hours
8	3/hour	1d12 hours

Average Speed is the vessel's velocity in astronomical units in the given time frame.

Roll indicates the travel time between any two points in a system, if you have no idea or inclination to figure out just where a particular planet is in relation to another.

Planetary Alignment

Any two bodies in a solar system can be described as being in conjunction, in opposition, or somewhere in between. Planets in conjunction are aligned on one side of their star, or close to it. Planets in opposition are on opposite sides of the star.

To figure out the distance between two planets in conjunction, find the difference in their orbital radii; to figure out the distance between planets in opposition, take the sum; and for anything else, take 80% or 90% of the sum.

◆ **Example:** A group of heroes are on Venus, which orbits at 0.7 AU, and they want to go to Jupiter, which orbits at 5 AU. If the planets are in conjunction, or generally on the same side of the Sun, the trip should be about 4.3 AU; if they're in opposition, the trip should be roughly 5.7 AU; and in any other alignment, assume the trip is 80% to 90% of 5.7, or about 5 AU.

TABLE 646: SPACESHIP DETECTION RANGE

System	Skill Check (O/G/A)
CE passive array	50 Mm/100 Mm/150 Mm
EM detector	30 Mm/60 Mm/90 Mm
IR detector	2 Mm/4 Mm/6 Mm
Mass detector	10 Mm/50 Mm/100 Mm
Radar:	
air/space	10 Mm/20 Mm/40 Mm
multiband	30 Mm/60 Mm/90 Mm
multiphase	40 Mm/80 Mm/120 Mm

TABLE 647: SPACE DETECTION MODIFIERS

Obscurity	Modifier
Critical	+3
Marginal	none
Ordinary	-1
Good	-2
Amazing	-3

If you need to know where one planet is in relation to another, just roll randomly to see if it is in conjunction, opposition, or somewhere in between. The next time the heroes need to go to that particular world again, simply reroll.

Orbital Movement

The transition between system travel and planetary travel is orbital, or near-space, movement. A ship in a stable orbit doesn't have to expend any energy to remain there; it continues to fall around the planet forever. Climbing to Earth orbit from the atmosphere requires a spacecraft to accelerate to a speed of roughly 24 kilometers per phase (24,000 kph) and an altitude of 200 km. Lower orbits are possible, but below 100 km the increasing resistance of the atmosphere guarantees that the orbit is short-lived.

An orbit can circle a planet in any direction; many satellites use a polar orbit, which means that over time the entire planet will rotate underneath their flight path. Another interesting orbit is the geosynchronous orbit, in which the ship or satellite matches the planet's rotation speed; the ship hovers over one spot on the planet's surface. The radius of a geosynchronous orbit is based on the planet's mass and rate of rotation; for Earth, it's close to 35,800 kilometers. The orbital altitude would be a lot lower around a world with a faster rotation.

Orbital maneuvers are a routine matter in advanced spacefaring settings. Any spaceship capable of interplanetary travel can assume the orbit of its choice when it arrives at a new world and maneuver to any new orbit in a matter of minutes. Assume that a minor adjustment to an orbit requires 5d6 minutes for PL 6 ships, or d6 minutes for PL 7 spacecraft. Major adjustments take twice as long. If the vessel is attempting to assume a very specific or difficult orbit, a Vehicle Operation or Navigation skill check may be appropriate for the hero attempting the action.

Leaving Earth orbit requires an acceleration up to about 34 kilometers per phase (34,000 kph). This is known as escape velocity. Once a ship leaves orbit, it's in interplanetary space.

Combat Movement

A ship moving at a very high speed is almost impossible to bring to a fight. However, the primary concern is how fast the ships can accelerate and move relative to one another. In PL 6, ships travel at relative speeds of about 1 to 5 megameters per phase (100,000 to 500,000 kph).

At PL 7, ships can fight and maneuver effectively at speeds of 1 to 10 megameters per phase (1 to 10 million kilometers per hour).

SPACESHIP COMBAT

To resolve combat between spacecraft, use the vehicle combat system described in the preceding chapter, with a few exceptions. The most significant of these is how a spacecraft takes damage; a spaceship isn't a vehicle with one set of stun, wound, and mortal ratings, but a collection of separate compartments and systems, each with its own ability to withstand punishment. There are a few other details to handle the unique setting of space as a battlefield, which are discussed below.

Setting up the Fight

First, you'll need to make the same decision you've already thought about for vehicle combat. Do you want to run this scene in narrative style? Then you'll use the rules for opening range, speeds, and intentions for each vehicle. If you intend to depict this as a visual scene, you'll need to use a hex map and you'll need to set a scale.



Cometary approach

Opening Range

As in vehicle combat, the opening range of the fight depends on the prevailing conditions. You can set the range to accommodate the needs of the story or the situation that started the combat, or determine the range randomly. TABLE G45: SPACESHIP OPENING RANGE is divided into a PL 6 column for low-tech, near-space combat, and a PL 7+ column for high-tech, open-space combat.

Hazardous conditions include entering or leaving a crowded space station or starport; *crowded* conditions include ships meeting in low orbit, a ring system, or an asteroid field; *normal* conditions refer to high orbit or the inner part of a solar system; *clear* conditions include interplanetary space in the outer portions of a star system, or interstellar space. All measurements are in megameters (Mm). See the "Measurements" sidebar on page 155.

Detection, Evasion, and Pursuit

In general, detection ranges are much greater than the opening ranges listed above. See TABLE G46: SPACESHIP DETECTION RANGE. Even the best long-range weapons can't equal the range at which sensors allow

TABLE G48: SPACESHIP OPENING SPEEDS

Prevailing Condition	PL 6 Speed	PL 7+ Speed
Hazardous	d4 × 0.1 Mpp	d6 × 0.1 Mpp
Crowded	d4+2 × 0.1 Mpp	2d6 × 0.1 Mpp
Normal	d6+4 × 0.1 Mpp	d6 × 1 Mpp
Clear	2d6+2 × 0.1 Mpp	2d6 × 1 Mpp

one ship to detect another. One ship or the other might decide to evade the battle by turning away as soon as a threat is detected.

Detection may be modified by the "visibility" of the sensor involved—radar is less effective in crowded conditions or near asteroids, IR and EM detectors may suffer near stars or civilized planets, and so on. At your discretion, apply modifiers from TABLE G47: SPACE DETECTION MODIFIERS to the operator's skill check.

A Failure result indicates that the sensor operator didn't detect the approaching threat until the enemy was actually in combat range; see TABLE G45: SPACESHIP OPENING RANGE. On a Critical Failure, the sensor operator didn't detect the enemy at all, and the enemy may be able to achieve surprise. See "Surprise," below.

If a vehicle spots an opponent before it gets within combat range, it may choose to flee and avoid combat. Compare the speed and acceleration of the vehicles. If the fleeing vehicle is faster, it will get away. If the pursuing vehicle is faster, it will eventually catch up and force a combat scene. You may allow special conditions or the use of special tactics to evade the attack.

Beginning Intentions

When setting up a space combat, the first thing you need to know is the opening speed for the spacecraft involved. You may already know this because of the situation that caused the combat, but if you don't, here are some guidelines to help you set it up.

The opening speeds of the spacecraft involved depend on the prevailing condition and how advanced the ships are. See TABLE G48: SPACESHIP OPENING SPEEDS.

Remember that Mpp stands for megameters per phase. One Mpp is equal to 1 million kilometers per hour (kph), or 0.001c. That's slow for most space vehicles of PL 7; cruising speed is closer to 0.4 or 0.5c. Of course, it's unrealistic for anything moving that fast to be engaged in combat.

It's worth noting that ships close to planets or in the process of docking or leaving dock travel even slower. These ships may be going no faster than 1 or 2 kilometers per phase on

the approach, down to 50 or 100 meters per phase for the final approach and less than a walking pace for the actual touchdown or connection.

Next, take a look at the circumstances that led to the scene and decide what direction each spaceship is heading. If one spaceship pursued the other, then the fleeing spaceship begins with an intent to open or break, while the pursuer begins with an intent to close. If the vessels were paralleling each other, both might begin with the intent to hold. Naturally, intentions may change in the first phase of maneuvering.

In the visual style, think of it this way: An intent to close means that the vehicle is heading toward its opponent, an intent to open or break means that it's heading away from its opponent, and an intent to hold means that it's heading off to one side or matching speeds.

Surprise

The rules and considerations discussed for surprise in vehicular combat apply to spaceship combat. As in the case of land and air vehicles, the surprised spaceship doesn't stand still during the surprise phase; it spends the surprise phase moving forward at its present speed.

Tactics—space tactics is the appropriate skill for setting up a spaceship ambush. The success of the ambush leader's Tactics check inflicts a +1, +2, or +3 penalty to the victim's System Operation—sensors check to avoid surprise. Of course, a spaceship that has already detected a would-be ambusher (see "Detection," above) can't be surprised.

In addition, the prevailing condition may provide a penalty or bonus. Hazardous conditions provide a +2 penalty to the victim's System Operation—sensors check. Crowded conditions add a +1 penalty. Normal conditions apply no modifier, and clear conditions provide the victim with a -2 bonus.

Scale

If you wish to use the visual scene presentation, you need to set a scale.

In each phase, a spacecraft moves a number of megameters (Mm) equal to its megameters per phase (Mpp). To keep this scale usable for a standard hex sheet, you should probably use a scale of 0.1 Mm per hex for

battles between low-tech (PL 6) spacecraft and high-tech spacecraft in hazardous or crowded conditions, and 1 Mm per hex for advanced (PL 7+) spacecraft in open space.

The Action Round

Spacecraft combat uses the same modifications to the action round described under "Vehicle Combat" in the previous chapter. Pilots and helmsmen may attempt Routine maneuvers during each phase, but Moderate and Extreme maneuvers require an action.

If a spaceship's engines aren't supplied with any power or have become damaged and nonfunctional, it can't attempt maneuvers or acceleration of any kind. It continues to move at its present velocity until the engines become functional or the ship hits something.

Narrative Combat

Spaceship combat works just as described in "Vehicle Combat" in *Chapter 10: Vehicles* with a few exceptions. Routine maneuvers are allowed every phase. To change intentions requires a Moderate or Extreme maneuver. Acceleration is allowed as part of any maneuver.

In the early years of PL 6, space combat is largely impossible, since tactical acceleration and turning are technologically infeasible. By the end of PL 6, spacecraft can attempt Routine and Moderate maneuvers, but can't attempt Extreme maneuvers. Since these ships are driven by reaction drives, they have nothing to push against in their maneuvers. They fly like rockets, not airplanes.

Spaceships of PL 7 and higher have engine systems that dig into the gravitational fields around them, allowing them to perform hard banks, loops, and other such maneuvers.

Visual Combat

Spaceships use a standard hex map for visual combat, just as vehicles do. Instead of using intentions, each grade of maneuver (Routine, Moderate, and Extreme) allows certain maneuvers to be performed. Most of these maneuvers and their diagrams

are listed in the "Vehicle Maneuvers Visualized" sidebar on page 136 in the previous chapter.

One maneuver is unique to spaceships: spin ship. As a Routine maneuver, spin ship imposes no penalty on the pilot or helmsman.

► **Spin ship:** The spacecraft can spin to face any direction desired while keeping its present course and speed, but it must spin back to match its original facing before it can attempt any other combat maneuvers.

Ships of PL 6 are limited to the following maneuvers: spin ship and turn (Routine maneuvers); tight turn and regain control (Moderate maneuvers, +1 penalty). In order to slow down, the pilot must perform the spin ship maneuver so the vessel is flying backward and accelerate in the opposite direction to decrease its velocity. Multiple phases of acceleration may be necessary before a vehicle changes the number of hexes it travels in a phase.

Ships of PL 7 and later have a wider choice of maneuvers: bank, roll, spin ship, and turn (Routine maneuvers); half-loop, long roll, regain control, and tight turn (Moderate maneuvers, +1 penalty); hard bank and loop and turn (Extreme maneuvers, +3 penalty). Ships using the spin ship maneuver can't attempt any other maneuvers while they're facing away from their line of flight. A spaceship can fly sideways or backward if its pilot wants to, but it must square its nose with its course before the pilot can resume normal maneuvering. This maneuver might be useful in bringing weapons to bear on enemies who would otherwise be outside their arc of fire.

Spaceship Maneuver Modifiers

Clear conditions -2

Normal conditions 0

Crowded conditions +1

Hazardous conditions +2

Traveling faster than cruising speed +1

Moderate maneuver (if no other penalties) +1

Extreme maneuver (if no other penalties) +3

Major spin +4

Spin +2

Yaw +1

Copilot assist +1 to -3

TABLE G49: LOSING CONTROL OF A SPACESHIP	
Skill Check Result	Outcome
Critical Failure	Major spin
Failure	Spin
Ordinary	Yaw
Good	Under control
Amazing	Under control

To determine who moves when in each phase, you'll need to determine who has the *advantage*. Each round, the pilot with the best action check result has the advantage. In the event of a tie, the pilot with the superior action check score has the advantage.

In each phase, the pilot with the advantage can choose to move his spaceship first or to allow his opponent to move first instead. Moving first might allow a spaceship to get into a good position to shoot before the enemy responds, or to get out of the enemy's sights before he can take his move. Moving second offers a pilot the chance to see where the enemy is going before committing to any movement.

A pilot keeps the advantage until he fails a maneuver check. When this happens, the advantage automatically shifts to the opponent. The advantage might shift back and forth several times in the course of a single round.

Pilot Skills

Whether the spaceship is a small space fighter or a formidable corvette, Vehicle Operation-space vehicle is the skill used by the pilot or helmsman. During each phase of combat, the pilot selects the maneuvers that guide the spacecraft, thus moving for a better position to shoot and not get shot.

Copilot Skills

The copilot or junior helmsman has the ability to take over for the pilot at any time. Piloting from the copilot's station imposes a +1 penalty. However, if the copilot takes an action to assist the pilot's maneuvering, a modifier may be applied to the pilot's next skill check. The result of the copilot's Vehicle Operation-space vehicle check determines the modifier: Critical Failure, +1 penalty; Fail-

ure, no modifier; Ordinary, -1 bonus; Good, -2 bonus; Amazing, -3 bonus.

Failing a Vehicle Operation Check

A pilot or helmsman who fails a Vehicle Operation skill check may or may not complete his maneuver as intended. He must immediately attempt a second Vehicle Operation skill check (applying any appropriate bonus or penalty) and consult TABLE G49: LOSING CONTROL OF A SPACESHIP. The possible outcomes are described below. In addition to what's discussed here, the Gamemaster may decide that when a spaceship goes out of control, it suffers some sort of mechanical breakdown that could prevent it from functioning properly or even render it useless until repairs are made.

Major spin: The spacecraft goes into a spin as noted below, and the pilot suffers a +4 penalty on all attempts to regain control. All characters in the vessel suffer a +2 penalty to any actions they attempt. If the ship is near a large object such as a station, asteroid, or planet, the Gamemaster can decide that a crash may occur.

Spin: The spaceship goes wildly out of control. The spin continues until the helmsman is able to make a successful Vehicle Operation-space vehicle skill check. Roll d8 to determine the direction the spaceship ends up facing when the spin ends: 1 = forward; 2 = forward/ right; 3 = right; 4 = backward/right; 5 = backward; 6 = backward/left; 7 = left; 8 = forward/left. The pilot can't do anything else until he manages to regain control of the spacecraft (by making a successful Vehicle Operation check), and all characters in the vessel—including the pilot—suffer a +2 penalty to any actions they attempt.

If the operator of a spaceship that's already in a spin fails another

Spaceship Attack Modifiers

Conditions: Cover	
Hazardous/heavy cover . . .	+3
Crowded/medium cover . . .	+2
Normal/light cover	+1
Clear/no cover	0
Energy weapon	
Short range	-1
Medium range	0
Long range	+1
Guided weapon	
Short range	0
Medium range	-1
Long range	0
Projectile weapon	
Short range	-1
Medium range	+1
Long range	+2
Attacker is piloting and making a Moderate or Extreme maneuver	
	+2
Target ship's maneuver in current phase	
Out of control	-2
None	-1
Routine	0
Moderate	+1
Extreme	+3
Target motion	
motionless	-1
exceeds cruising speed . . .	+2

Vehicle Operation skill check and then gets any outcome on TABLE G49: LOSING CONTROL OF A SPACESHIP other than "Under control," the vehicle enters a major spin (see above).

Yaw: The vehicle slides at an angle to the right or left while continuing to maintain forward momentum. Roll d6 to determine which side the vehicle slides toward: 1-3 = right, 4-6 = left.

The yaw continues until the pilot's next available action, at which time he can end the yaw immediately by using that action (no skill check is required) to bring his vessel under control. Alternatively, he can attempt a Vehicle Operation-space vehicle check with a +1 penalty (in addition to other penalties that may apply). If this check succeeds, he ends the yaw and is able to perform a Routine maneuver in the same phase. If this check fails, the spaceship enters a spin.

Under control: The helmsman either experiences no trouble and continues on his way, or manages to get an out-of-control vessel back on track.

Attack and Defense

Using a spaceship system to attack or to defend against an attack requires an action on the part of some character in the spaceship. A weapons officer can operate the weapons any time he can perform an action during the round. The pilot can do so too, but operating a weapon system and performing a maneuver in the same phase adds difficulty to the maneuver check.

One extremely useful tactic in spaceship combat involves holding your action. If the weapons officer doesn't have a good shot in the Amazing phase, he can always wait until the Good, Ordinary, or Marginal phase to see if a better shot develops. Sometimes a spaceship might be in a great position early in the round—but if no one on board has an action available, no shot takes place. Such is the stress and uncertainty of combat.

Attack Skills

The rules for attacking with a spaceship weapon system are much like those for attacking with a personal weapon. The target may have a resistance modifier, reflecting how hard it is to hit; it may be at short, medium, or long range; it may have some kind of cover. The skill used by the attacking character is System Operation-weapons. These powered weapons systems are typically intended for control by someone other than the helmsman. For example, the weapons officer controls the weapons while the sensors officer operates radar and detectors.

Defense Skills

Spaceship defenses operate differently from the simple defense mechanisms of personnel and vehicles such as armor. Armor and ablative shields are passive defenses. No skill check is required to operate passive systems under normal circumstances.

Active defense systems, on the other hand, require direct guidance from an operator. Chaff, point-defense guns, deflection inducers, and displacers are active defenses. Generally, the operator of a defense system holds his action until an attack is declared against his ship, where-

Boarding

To attempt a boarding operation, a vessel must precisely match the speed and course of the target vessel. Even minor differences in the relative motion of two spacecraft are sufficient to prevent boarding.

In most cases, this requires that the target vessel no longer has the means to accelerate or change course. This can be accomplished by crippling the target through incapacitating its engines or power plant. It can also be accomplished using a tractor beam, a weapon described in the previous section.

Once the target vessel can no longer accelerate, it's a simple matter for a helmsman to match velocity and move into a close proximity (less than a megameter). Then the captain can choose whether to actually dock, mating the airlocks of the two vessels, or to launch a boarding pod.

upon the operator makes a skill check to determine his success. The effects of the check are given in each individual defense system description earlier in this chapter.

The skill used by the defending character is System Operation-defenses. These powered defense systems are typically intended for control by someone other than the helmsman. For example, the defenses officer controls the defenses while the sensors officer operates radar and detectors.

Sensor Skills

Sensors perform critical roles in any space combat. The first part of any engagement is detection of the enemy (see "Detection Evasion, and Pursuit," above). In addition to locating the enemy, the sensors officer acts as an important member of the combat team. The primary function of the sensors officer in combat is to analyze the enemy ship with a successful System Operation-sensors skill check, identifying the function of each of the enemy ship's compartments.

There are two ways in which sensors can assist an attack. By spend-

TABLE G50: COMPARTMENT HIT LOCATION

d20 Roll	2	3	4	5	6	7	8	9	10	11	12
(-4)	1	1	1	1	1	1	1	1	1	1	1
(-3)	1	1	1	1	1	1	1	1	1	1	2
-2	1	1	1	1	1	1	1	1	1	2	3
-1	1	1	1	1	1	1	1	1	2	3	3
0	1	1	1	1	1	1	1	2	3	3	4
1	1	1	1	1	1	1	2	3	3	4	4
2	1	1	1	1	1	2	2	3	4	4	5
3	1	1	1	1	2	2	3	4	4	5	5
4	1	1	1	2	2	3	3	4	5	5	6
5	1	1	2	2	3	3	4	5	5	6	6
6	1	2	2	2	3	4	4	5	6	6	7
7	2	2	2	3	3	4	5	6	6	7	7
8	2	2	3	3	4	4	5	6	7	7	8
9	2	2	3	3	4	5	5	6	7	8	8
10	2	2	3	4	4	5	6	7	7	8	9
11	2	2	3	4	5	5	6	7	8	9	9
12	2	3	3	4	5	6	6	7	8	9	10
13	2	3	4	4	5	6	7	8	8	9	10
14	2	3	4	4	5	6	7	8	9	10	10
15	2	3	4	5	6	6	7	8	9	10	11
16	2	3	4	5	6	7	7	8	9	10	11
17	2	3	4	5	6	7	8	9	10	11	11
18	2	3	4	5	6	7	8	9	10	11	12
19	2	3	4	5	6	7	8	9	10	11	12
20+	2	3	4	5	6	7	8	9	10	11	12

When a ship is hit, roll d20 and refer to the column for number of compartments. The number in that column is the number of the compartment that was hit.

ing an action, the sensors operator can improve the odds of a successful hit. The sensors operator's skill check may provide a modifier to the weapons operator in the next available phase. Critical Failure, +2 penalty; Failure, no modifier; Ordinary -1 bonus; Good, -2 bonus; Amazing, -3 bonus.

Second, the sensors operator can spend an action attempting to target a specific compartment of an enemy vessel. To do this, the sensors operator must have an action in the same phase in which a successful shot is fired. If the weapons officer generates a hit, the sensors operator then rolls a System Operation-sensors check. The result allows the sensor operator to adjust the random hit determination of compartments (see "Damage," below): Critical Failure, weapon shot misses target completely; Failure, no modifier; Ordinary, adjust d20 compartment roll by ± 1 ; Good, adjust roll by ± 2 ; Amazing, adjust roll by ± 3 .

◆ **Example:** Immediately following a successful skill check by the weapons officer, Kalin Starborne

uses his *sensors* skill to target the laser. Kalin gets a Good success, and then a 5 is rolled to determine which compartment of the enemy ship is hit. Kalin's player can look at TABLE G50: COMPARTMENT HIT LOCATION and change the d20 result to any number from 3 to 7.

Sensors operators can also spend an action to assist the defenses operator in protecting the ship, providing a modifier for the rest of the current round and all of the next round. Skill check results: Critical Failure, +2 penalty; Failure, no modifier; Ordinary -1 bonus; Good, -2 bonus; Amazing, -3 bonus.

Onboard sensor systems rely on the System Operation-sensors skill. Usually, a sensors officer operates this equipment.

Communication Skills

The primary function of the communications officer is sending and receiving messages. During combat, the comm officer can send messages

to ships or other distant locations, and code them if desired. The result of a System Operation-communications skill check may provide a modifier to decoding attempts made by others: Critical Failure, -2 bonus; Failure, no modifier; Ordinary, +1 penalty; Good, +2 penalty; Amazing, +3 penalty.

In a ship equipped with a jammer, a defense system, a comm officer can spend an action jamming enemy transmissions. The result of her skill check applies to the opponent's communications skill checks in the next round.

In addition, the comm officer can spend an action using a jammer to apply the above modifiers to the sensors checks of an enemy vessel in the the next round.

Command Skills

The commanding officer aboard a vessel can use Tactics-space *tactics* to apply penalties to the enemy and Leadership-command to apply bonuses to officers under his charge. See the skill descriptions in Chapter 4: Skills in the Player's Handbook.

Also, the commander can spend an action analyzing enemy movement and providing warning. The result of a Tactics-space *tactics* skill check may provide a modifier to the next action checks made by the rest of the ship's crew: Critical Failure, +2 penalty for all other crew members; Failure, no modifier; Ordinary -1 bonus for one other crew member; Good, -1 bonus for all other crew members; Amazing, -2 bonus for all other crew members.

Damage

All spaceships have Amazing toughness. The damage from weapons of Good toughness—which includes most heavy and vehicular weapons—automatically degrades; mortal damage becomes wound damage, wound damage becomes stun damage, and stun damage is ignored. The damage done by weapons of Ordinary firepower—which includes most personal weapons—degrades twice; mortal damage becomes stun damage, and wound and stun damage are ignored. For example, a hero who fires a 9mm pistol at a ship must score an Amazing hit (which inflicts mortal damage but is degraded to stun damage) in order to affect the

Capital Ships

The spaceship combat rules presented in this chapter are designed to handle skirmishes between vessels of small to moderate size. Most spacecraft under the command of typical player-controlled heroes are likely to be crewed by a dozen or fewer people.

Of course, larger and more powerful warships may exist in your campaign: destroyers, cruisers, dreadnoughts, and maybe even mighty fortress ships. These titans duel with weapons that could incinerate even corvette-class ships with a single shot.

Since the individual skills and talents of the heroes fade into the background in a clash between capital warships, there's no detailed resolution system for dealing with this topic. If you need to know who's winning a battle, roll an opposed *Tactics-space tactics* check between the two captains or admirals. The winner defeats or drives off his enemy; if both captains tie, the ships duel to a standstill and withdraw to lick their wounds. To reflect disparity in forces, give the commander of the more powerful ship or fleet a -2 bonus—or even more for real mismatches.

Once you know how the major battle turns out, you can decide how it affects the course of the heroes' adventure.

ship. Any armor the spaceship has may reduce or negate that damage.

For purposes of assessing damage, spaceships share many characteristics with characters and vehicles. Spaceship compartments have stun, wound, and mortal ratings; wound or mortal damage inflicted by enemy weapons also causes secondary damage; and a spaceship's armor may stop some or all of the primary damage of a hit.

Whenever a ship is struck by weapons fire, a random compartment is damaged. Successful use of sensor systems may modify this roll (see "Sensor Skills," above). Refer to TABLE G50: COMPARTMENT HIT LOCATION.

The reason that hit locations are set up in an asymmetrical fashion is to reflect the fact that some compartments of the ship are hidden deep in its structure, making them harder to hit than other compartments. Most ship designers place the least vital systems in the ship's outermost compartments, expecting a captain would rather lose a cargo hold to enemy fire than his power plant or command deck.

Compartment Damage

A compartment's mortal rating is the same as its number of durability points, and its stun and wound ratings are twice that number.

Stun Damage

When a compartment takes stun damage equal to more than half of its stun rating, the use of any system housed in that compartment suffers a +1 penalty. When a compartment loses all of its stun points, additional stun damage converts to wound damage at the rate of 1 wound for every 2 points of stun damage.

In addition to the +1 penalty, a compartment that loses more than half of its stun points may suffer a system failure. A durability check must be made for the compartment. The ship's skill score for this check is equal to its original stun rating (twice its durability).

If the compartment fails its durability check, one system in the compartment (roll randomly to determine which) ceases to function. Onsite repairs using *Technical Science-juryrig* or remote repairs using *System Operation-engineering* may allow the system to be temporarily restored for a number of rounds, as described under the *Technical Science-juryrig* skill description in *Chapter 4: Skills* in the *Player's Handbook*. Eventually, permanent repairs will be necessary.

Wound Damage

For every 2 points of wound damage suffered, a compartment also suffers 1 point of secondary stun damage. Secondary damage is calculated before armor absorbs primary damage. Armor has no effect on secondary damage.

When a compartment takes wound damage equal to more than half of its wound rating, the use of

any system housed in that compartment suffers a +1 penalty. When a compartment loses all of its wound points, additional wound damage converts to mortal damage at the rate of 1 mortal for every 2 points of wound damage.

In addition to the +1 penalty, a compartment that loses more than half of its wound points may suffer a system failure. A durability check must be made for the compartment. The ship's skill score for this check is equal to its original wound rating (twice its durability).

If the compartment fails its durability check, one system in the compartment (roll randomly to determine which) ceases to function. Onsite repairs using *Technical Science-juryrig* or remote repairs using *System Operation-engineering* may allow the system to be temporarily restored for a number of rounds, as described under the *Technical Science-juryrig* skill description in *Chapter 4: Skills* in the *Player's Handbook*. Eventually, permanent repairs will be necessary.

Mortal Damage

For every 2 points of mortal damage suffered, a compartment also suffers 1 point of secondary stun damage and 1 point of secondary wound damage. Secondary damage is calculated before armor absorbs primary damage. Armor has no effect on secondary damage.

Each point of mortal damage inflicted on a compartment imposes a +1 penalty to any systems contained within the compartment. All penalties caused by stun, wound, and mortal damage are cumulative.

Each time a compartment suffers mortal damage, a durability check must be made for the compartment. The ship's skill score for this check is equal to its original wound point total (twice its durability). Apply a +1 penalty for every point of mortal damage that the compartment has suffered, as well as penalties for excessive stun and wound damage.

If the compartment fails its durability check, all systems within the compartment cease functioning until repairs are made. *Technical Science-juryrig* may allow for the compartment to be temporarily restored for a number of rounds, as described under the skill description in *Chapter 4: Skills* in the *Player's Handbook*.

If the compartment fails its durability check with a Critical Failure,

it's destroyed, and d4 other compartments sustain 2d4w each due to decompression, power fluctuations, and fire. Armor offers no protection against internal damage.

When a compartment is completely wrecked (all mortal points gone), it ceases to exist on the ship record form, and all damage that strikes that location automatically is applied to the next lower-numbered compartment. If necessary, wrap around to the highest-numbered compartment if the lowest is destroyed.

◆ **Example:** Compartment 2 of a trader-class vessel is destroyed by enemy fire. The next hit on that compartment is automatically applied to compartment 1. If compartment 1 is destroyed, the next hit on that compartment is applied to compartment 6, the ship's highest-numbered compartment.

Damage to Passengers and Crew

When a compartment suffers damage, individuals inside may suffer damage. First, armor is accounted for and the primary damage suffered by the compartment is calculated. Any individual inside then suffers the same damage, reduced one grade. If the individual is wearing armor, it may be taken into account. Damage suffered by passengers and crew is low impact (LI).

◆ **Example:** Wallace is working within a compartment when it is hit for 8 points of wound damage. The compartment's armor absorbs 5 wounds, leaving it with 3 points of wound damage. Wallace, who is wearing no armor, takes 3 points of stun damage.

Characters in compartments that are completely destroyed (all mortal points gone) may suffer the effects of decompression. See "Environments" in *Chapter 3: Gamemasters in Action*.

Engineering Skills

The most basic function of the engineering officer in combat is the proper direction of power resources. With an action, the engineering officer can freely allocate the ship's power factors to its various systems: engines, weapons, defenses, and sensors.

The secondary function of the en-

gineer is to direct and assist in the completion of repairs. The engineer can spend an action to attempt repairs of a minor nature in any compartment while remaining at his station (which may be in either a command or engineering compartment). A remote repair can reduce stun damage caused directly by enemy damage or by the secondary effects of heavier wound or mortal damage. A remote repair can also reactivate a system rendered inoperative due to excessive stun damage.

The engineer's System Operation–engineering skill check result determines the amount of stun damage repaired: Critical Failure, compartment suffers d4 points of stun damage; Failure, no stun points repaired; Ordinary, 1 stun point repaired; Good, 2 stun points repaired; Amazing, 3 stun points repaired.

When using a remote repair to temporarily fix an inoperative system, use the rules in the Technical Science–juryrig skill description; the system can be temporarily restored. Once such an attempt is made, the engineering officer can't attempt another remote repair in the target compartment until it suffers additional damage.

Finally, the engineering officer can spend an action to assist a damage control officer in any compartment. The result of a System Operation–engineering skill check may provide a modifier to the damage control officer's next repair attempt: Critical Failure, +2 penalty; Failure, no modifier; Ordinary –1 bonus; Good, –2 bonus; Amazing, –3 bonus.

Damage Control Skills

The damage control officer must rush to a damaged compartment to affect repairs. It's necessary to work in the damaged compartment to repair wound or mortal damage, and to attempt the restoration of a system that ceased operating due to a failed durability check or a compartment that ceased operating due to mortal damage.

Immediate repairs, such as those made during combat, require the use of Technical Science–juryrig. Skill check result: Critical Failure, the system or compartment becomes unusable until full repairs are made;

Failure, the juryrig attempt doesn't work but can be tried again later; Ordinary, the system or compartment becomes operational for d6+1 rounds; Good, becomes operational for 2d4+1 rounds; Amazing, becomes operational for 3d4+1 rounds.

Unfortunately, juryrigging has the side effect of causing trouble during full repairs. During the complex skill check for a full repair, additional successes are required depending on the success rolled during juryrigging. An Ordinary juryrigging result requires 3 additional successes; a Good result requires 2 additional successes; and an Amazing result requires only 1 additional success.

Full repairs require the use of the Technical Science–repair skill and a complex skill check. The complexity of the skill check is determined by the amount of damage sustained. A damage control officer can only repair one compartment at a time.

Repairing stun damage is a task of Ordinary complexity, requiring a total of 3 successes. Repair attempts to build up these successes can be made once per round of work. Once the complex skill check is complete, all stun damage to the compartment is removed.

Repairing wound damage is a task of Good complexity, requiring a total of 4 successes. If the compartment has suffered damage equal to or less than half of its wound rating, repair attempts to build up these successes can be made once per minute of work. If the compartment has lost more than half of its wound points, repair attempts to build up these successes can be made once per hour of work. Once the complex skill check is complete, all wound damage to the compartment is removed.

Repairing mortal damage is a task of Amazing complexity, requiring 8 successes plus 1 additional success for every point of mortal damage. Attempts to repair mortal damage can be made once per day of work. Once the complex skill check is complete, all mortal damage to the compartment is removed.

When all of a compartment's damage has been fully repaired, its systems are fully repaired also.

Compartments that have lost all of their mortal boxes can't be repaired; the compartment and all of its systems must be replaced. See "Adding New Systems" on page 155.



CHAPTER 12

ALIEN ARTIFACTS

Mysterious and unique, artifacts are devices that human science cannot fully explain or duplicate.

While alien artifacts may give the heroes special abilities or hamper them in unusual ways, they give you a number of story vehicles and plots to weave adventures around. Where did the artifact come from? Who wants it, and why? And what miracles might the hero perform with the artifact?

Artifacts are created by means beyond human ken. While this often implies a star-spanning civilization that preceded humanity—or one that watches over it today—it's quite possible for a highly advanced civilization to never leave its own planet...

...and when humans arrive to explore the ruins, there's no telling what they might find. Alien artifacts might drop in on perfectly normal people unexpectedly, or they may be the goal of extensive quests taken on by the greatest of heroes.

ARTIFACT ACQUISITION

Artifacts appear through one of two different ways. Either a hero begins play with an artifact by selecting the Alien Artifact perk or flaw, or the heroes uncover an alien artifact during their adventures.

Perks and Flaws

When a player selects Alien Artifact as a perk or flaw, you need to do a bit of work to prepare the character for your campaign. First, you'll have to design the artifact in question. As a perk, the device provides more benefits than penalties; as a flaw, the device is more trouble than it's worth.

Second, you'll have to think about how the character acquired the device, what technology or civilization it represents, and who knows about the hero's special device. Getting the player involved in the process—even if you keep a few secrets and surprises to yourself—is a good idea. Alien artifacts demand incorporation in the stories you create. At the same time, the presence of a mysterious item of legend opens up a number of adventure possibilities.

Since the artifact is tied to the hero during the creation process, it should be difficult for the hero and the hero's special possession to become separated on a permanent basis. It's unfair to the player to lose an artifact in the first adventure after allocating precious skill points to it during character creation. Nor is it fair if a hero gets the bonus skill points from an Alien Artifact flaw

and acquires a device that can easily be sold or thrown away.

At your discretion, a hero might "cash in" his alien artifact at some point. The hero could buy off the flaw, severing the connection to the device. It also might fit the story for the hero to turn in a perk for an equal number of skill points—maybe the hero submits his invention to the research institute for study.

Artifacts in the Story

Heroes may run across unusual devices or situations later in their careers. When you place an alien artifact in an adventure, you decide what role it will play—baneful or beneficial, asset or liability.

You should feel more free to exercise your whims with artifacts that you give to heroes during play. Since the heroes didn't pay anything to obtain their new toy, it's okay if it becomes lost, destroyed, or stolen in the course of the campaign.

It's important that alien artifacts remain obscure, unique, and wondrous. In a sense, the artifact defines the character who owns it, becoming a part of the concept and image of the hero. When an artifact is encountered during a story, it shouldn't be an event of passing significance. It should represent a major plot development with momentous implications for the campaign. The artifact rules presented here aren't intended to give your heroes even more astounding powers of mind and body; they're here to help you build a feature to add to your adventures.

ARTIFACT DESIGN

The process of creating an alien artifact consists of four steps:

1. Form
2. Purpose
3. Powers
4. Drawbacks

This should be a creative process, so let your imagination run wild. The design considerations discussed below are guidelines. As always, you should feel free to modify and adapt the rules to your campaign as you see fit.

Form

It's up to you to decide whether to first select the artifact's shape and appearance, or whether you want to decide its general purpose before anything else. Does form follow function, or vice versa?

A list of several possible forms can be found on TABLE G51: ALIEN ARTIFACT FORM (on the following page). Choose one that strikes your interest, or roll the dice and allow chance to decide.

In addition to selecting a physical form, you should consider the characteristics and properties of the artifact. What does it look like, feel like, smell like? Is it simple or complex, rough or smooth, sturdy or delicate, symmetrical or crooked? Does it react normally to various stimuli—getting warm when heated, for example? Or does it defy classification? Details make an alien artifact

memorable, and sometimes a little frightening for the heroes.

The physical forms listed on Table G51 are explained below.

Appliance or Machine

The artifact is a substantial mechanical or electronic device, ranging in size from a microwave oven to a steam turbine filling a large room. It's designed to be installed and turned on, instead of being carried like a flashlight or a sidearm. A hero with an artifact of this size needs to find a place to keep it. Leaving it at the team headquarters or in the ship is a good option. An artillery-sized weapon, resurrection machine, computer, shield generator, or long-range communicator might fall into this category.

Carried Device

The artifact assumes the form of a small device easily carried by a single person; it may or may not be especially concealable. Most personal weapons and special tools fall into this category.

Clothing or Worn Device

The artifact can be worn like an article of clothing or jewelry. It's up to you whether the artifact can masquerade as an unremarkable garment or is easily identified as something special. Defensive devices are usually of this type.

Graft or Implant

Much like a piece of cybernetic equipment, the alien artifact has been installed within the hero's body. If it replaces a limb or covers the body's surface, it may be quite noticeable; deeper implants are usually undetectable by the naked eye. The device may mimic, replace, or improve the biological systems and organs within the hero's body, or it could be a module that doesn't interfere with the hero's normal biological functions.

Heroes with alien implants might be subjects of experimentation, unwilling agents or emissaries of the alien power, or even special agents given access to unusual technology. Some implants may not be conventional technological devices; a symbiotic organism living in the hero's bloodstream falls into this category.

TABLE G51: ALIEN ARTIFACT FORM

d20	Form
1-3	Appliance or Machine
4-9	Carried device—roll d20:
	1-2 Baton
	3 Book
	4 Disk
	5 Case/kit
	6 Instrument
	7 Pack
	8-9 Pistol
	10 Rifle
	11-12 Shield
	12 Sphere
	13 Staff
	14 Sword
	15-16 Tool, small
	17-18 Tool, medium
	19-20 Tool, large
10-14	Clothing/Worn device—roll d20:
	1-2 Amulet
	3-5 Armor
	6 Bracelet
	7-9 Cloak/cape
	10 Footwear/boots
	11-12 Handwear/glove
	13-14 Harness/belt
	15-16 Headgear/helmet
	17-18 Jacket/coat
	19 Jumpsuit
	20 Ring
15-16	Graft or Implant—roll d20:
	1-2 Right arm
	3-4 Left arm
	5 Right leg
	6 Left leg
	7-10 Torso
	11-14 Head
	15-16 Full body, skeletal
	17-18 Full body, muscular
	19 Full body, vascular
	20 Full body, nervous
17-18	Procedure or Treatment
19	Site or Installation—roll d20:
	1-10 Well known
	11-20 Not well known
20	Vehicle—roll d20:
	1-10 Ground vehicle
	11-15 Water vehicle
	16-18 Air vehicle
	19-20 Space vehicle

Procedure or Treatment

Subjected to a special procedure, the hero has been altered by alien technology. This could have been a mental training regimen, where the hero learned how to use his mind to the greatest effect. Or it might have involved exposure to mutagenic processes, augmentation of the hero's physiology, or anything else you can think of. The hero might not even be aware of who changed him—or why.

Site or Installation

The artifact is a special facility that cannot be removed from its current location. It might be a widely known monument or mystery that the hero solved or investigated secretly, or it could be an undiscovered place that the hero stumbled upon. Perhaps the installation has worked some kind of transformation on the hero, or it might provide a special and unique resource that only the hero can use.

An immobile site might demand the hero's periodic return in order to retain any benefits he gains from it. For instance, once every year the hero might have to recharge his cosmic energy by bathing in the iridescent splendor of the Crystal Shrine of Ridan. It's also possible that the artifact may be able to monitor the hero from afar, communicating telepathically and instantaneously, no matter how far away the hero is.

Vehicle

The artifact is too large to carry, but at least it can move itself around. It may be a vehicle capable of actual motion—a car, plane, or flying saucer; or it might be a vehicle of a different type—a teleportation pad or a time machine. Perhaps it isn't really a transportation device at all, and any abilities it possesses for movement might be secondary to its true function. For example, a car-sized alien computer that follows the hero around matches this definition.

Purpose

If humanity is any model, alien civilizations are likely to fill the galaxy with useless junk: disco records, styrofoam cups, garlic presses, or ceramic alligators. Fortunately, we're not interested in artifacts like these. They may be worth money to the collectors of such trivia, but they don't

TABLE G52: ARTIFACT PURPOSE

Primary (d20)	Secondary (d20)	Purpose
1-2	1	Communication
3	2	Control
4-6	3-4	Defense
7-8	5	Environment
9-10	6	Information
11	—	Medical
12	—	Mental enhancement
13-15	7-8	Offense
16-17	9	Physical enhancement
18	10	Transmutation
19-20	11-12	Transportation
	13-20	None

do anything. In your campaign, an alien artifact should have significant and powerful capabilities. The first step in identifying these capabilities is determining the artifact's purpose.

Table G52 lists possible purposes for an artifact. Roll once for a primary purpose and once for a secondary purpose, or select a combination of purposes that seems appropriate. While artifacts may have a variety of powers and drawbacks, most of these are tied to its primary purpose.

◆ **Example:** Jennifer is rolling up a random artifact. She starts with TABLE G51: ALIEN ARTIFACT FORM, and rolls a 15; the hero in question has an alien graft or implant. She then rolls a 20; the implant is a full-body nervous system graft. Jennifer goes on to TABLE G52: ARTIFACT PURPOSE to see what it does. Rolling for primary purpose, she comes up with an 18. The device is designed to transmute materials in some fashion. For the secondary purpose, Jennifer rolls an 8; it's meant to be used as a weapon.

Communication

The device has unusual capability for communication. The communication may take any form, such as telepathy, instantaneous radio, empathy, or universal translation.

Control

The artifact is designed to control a specific site or system, providing the hero with access to that area's assets. Optionally, the artifact may exert some kind of unusual command or control over a certain type of machine, such as computers, grav-

ity induction engines, or stardrives. It might even allow control over certain types of life forms.

Defense

The device is intended to protect its user from harm. Force screens, kinetic dampening fields, displacement shields, physical armors, and other similar devices may surround and shield the artifact's owner.

Environment

The artifact manipulates the surrounding environment—purifying the air, extinguishing fires on command, controlling the temperature in the vicinity, and so on.

Information

The purpose of the device is to gather information or increase the user's ability to do so. For example, the device might provide the user with clairsentience, drastically improve his vision or hearing, or act as a database.

Medical

The artifact's primary purpose is to heal injured creatures. The artifact possesses the ability to scan life forms and restore tissue to its undamaged state. Most medical artifacts function on any species.

Mental Enhancement

The artifact serves to enhance the user's mental abilities. Typically, this results in a modification to the character's Ability Scores, resistance modifiers, or skills.

Offense

The device is a weapon of a level and power that exceeds the capabilities of the current Progress Level. As another option, the artifact with an offensive purpose can act indirectly, improving the hero's own performance in combat.

Physical Enhancement

The device augments the hero's physical capabilities. It might be an improvement of the musculature or skeleton, or a metabolic supercharger that makes the hero a dynamo when forced into a fight.

Transmutation

The purpose is to change one material, item, or form of energy into something else. For example, one alien artifact might use ambient energy to build or reorganize matter, and another may instantly reduce tall pine trees into sawed planks.

Transportation

The artifact is designed to convey its user in some manner. To the denizens at the current Progress Level, the transportation that the artifact provides may seem miraculous.

POWERS & DRAWBACKS

Although all alien artifacts are rare and wonderful devices, their exact abilities must be defined for game purposes. Powers are described as Ordinary, Good, or Amazing. Drawbacks are described as Slight, Moderate, and Extreme. When a hero selects an alien artifact as a perk, the result is typically an artifact with Good or Amazing powers balanced by Slight or Moderate drawbacks. A flaw artifact displays Ordinary powers that must be paid for with Moderate or Extreme drawbacks. Naturally, when you design an artifact for the heroes, it can have as many powers or drawbacks as you like.

Powers

After you've determined the primary and secondary purposes of the device and the number of its powers and drawbacks, you're ready to determine its powers. You can either choose powers that seem appropriate to you, or you can let the dice fall where they may on Table G55.

Analysis

The artifact provides a detailed analysis of any object or area scanned. Generally, the analysis power has a range of 20 meters and can affect one target at a time, or an area 6 meters in diameter. A detailed analysis of an object or situation provides a +3 bonus to any Science or Investigate skill checks based on the information.

Ordinary: All energy forms and relationships are analyzed with complete accuracy.

Good: Energy and inanimate matter or compounds are analyzed with complete accuracy.

Amazing: Energy, inanimate matter, and living organisms are analyzed with complete accuracy.

Anti-life Ray

The device emits a beam of energy that disrupts bioelectric energy. The weapon is fired using the Modern Ranged Weapons skill. Select a specialty skill (pistol, rifle, or SMG) appropriate to the device's form. On a hit, the beam does $d4w/2d4w/3d4w$ of energy (En) damage at Ordinary firepower, depending on the degree of success achieved. Armor is useless against an anti-life ray.

Ordinary: Beam affects a single target out to a range of 20 meters; it may fire once per day.

Good: Beam affects all targets in a path 1 meter wide and 40 meters long, and may be fired three times per day.

Amazing: Beam affects all targets in a path 2 meters wide and 60 meters long, and may be fired six times per day.

Armor

The device can either be worn as armor, or serve to toughen the wearer's body against attack. If combined with another form of armor, only the more effective armor is considered.

Ordinary: The armor absorbs $d6+1$ hits against any attack.

Good: The armor absorbs $2d4$ hits against any attack and provides Good toughness.

Amazing: The armor absorbs $2d4+1$ hits against any attack and provides Amazing toughness.

Carrier Wave

The artifact converts itself and its wearer or user into an energy form that is capable of rapid travel. You

TABLE G53: ALIEN ARTIFACT AS PERK

d8	Primary Powers	Secondary Powers	Drawbacks
1	1 O	—	—
2	1 O	1 O	—
3	2 O	1 O	1 S
4	1 G	1 O	1 S
5	2 G	1 O	2 S
6	1 A	1 O	1 M
7	1 A	1 G	1 M, 1 S
8	2 A	1 G	2 M

TABLE G54: ALIEN ARTIFACT AS FLAW

d8	Primary Powers	Secondary Powers	Drawbacks
1	—	—	1 M
2	1 O	—	1 M, 1 S
3	1 O	1 O	2 M
4	2 O	1 O	2 M, 1 S
5	1 G	1 O	1 E, 1 S
6	2 G	1 O	1 E, 1 M
7	1 A	1 O	2 E, 1 M
8	1 A	1 G	3 E, 1 M

TABLE G55: ARTIFACT POWERS
Communication (d4)

- 1 Cyberconscious
- 2 Empathy
- 3 Star transceiver
- 4 Telepathy

Control (d4)

- 1 Cybercontrol
- 2 Dark matter control
- 3 Kinetic control
- 4 Probability control

Defense (d4)

- 1 Armor
- 2 Displacement
- 3 Energy dispersal
- 4 Kinetic dispersal

Environmental (d4)

- 1 Magnetic control
- 2 Molecular manipulation
- 3 Photonic manipulation
- 4 Stealth field

Information (d4)

- 1 Analysis
- 2 Omnidata computer
- 3 Precognition
- 4 Postcognition

Medical (d4)

- 1 Healing touch
- 2 Immortality
- 3 Regenerator
- 4 Resuscitator

Mental Enhancement (d4)

- 1 Heightened Intelligence
- 2 Heightened Personality
- 3 Heightened Will
- 4 Multitasking

Offense (d4)

- 1 Anti-life ray
- 2 Dark matter attack
- 3 Disintegration field
- 4 Gravity generation

Physical Enhancement (d4)

- 1 Heightened Constitution
- 2 Heightened Dexterity
- 3 Heightened Strength
- 4 Hyper adaptation

Transmutation (d4)

- 1 Elemental conversion
- 2 Molecular transformation
- 3 Oxidation/reduction
- 4 Virtual matter creation

Transportation (d4)

- 1 Carrier wave
- 2 Dimensional shift
- 3 Time travel
- 4 Teleportation

can choose exactly what form of energy the artifact uses. An electrical carrier wave allows movement along wires. Light or radiation carrier waves permit line-of-sight movement through the air. Sound or seismic carrier waves travel through water and solid objects. Psionic carrier waves may allow movement in all mediums, but may be detected by Mindwalkers.

If the hero encounters something that interferes with the carrier wave—such as a short in a wire, smoke, or radiation shielding—the hero materializes at that point or returns to his departure point, at your choice. Travel speed depends on the medium of the wave. Visible light and radio waves travel at the speed of light—about 300,000 kilometers per second.

Ordinary: The artifact can induce the carrier wave once per day for up to 1 minute.

Good: The artifact can induce the carrier wave four times per day for up to 10 minutes at a time.

Amazing: The artifact can induce the carrier wave once every 2 hours for up to 15 minutes at a time.

Cyberconscious

The artifact functions as a gridcaster, allowing the hero to project his consciousness into computers, networks, and computerized machinery. He can download or install programs and information by use of the Knowledge-computer operation skill.

Ordinary: The artifact confers a -2 bonus and must be in contact with the target computer.

Good: The range increases to 500 meters, and the bonus to -3 steps.

Amazing: The range increases to 50 kilometers with a -4 step bonus.

Cybercontrol

The hero can exert control over any computer or computerized machinery, causing it to respond at will. Security doors open, automated machinery starts or stops operation, and vehicles with robotic or computer controls move as directed. The exact degree of control is determined by the hero's Knowledge-computer operation skill check:

On an Ordinary success, the device's operation is interrupted or interfered with, providing a +2 penalty to its operation or causing a temporary failure.

On a Good success, the device is controlled for as long as the hero maintains his concentration, acting in whatever manner he dictates.

On an Amazing success, the artifact functions as above, but the hero can issue commands for specific operations that remain in place until someone repairs the device.

Cybercontrol can be used at will, whenever the hero spends an action to do so. The hero must be able to see the device he intends to control.

Ordinary: The device provides a -2 bonus to appropriate skill checks and has a range of 10 meters.

Good: The bonus is -3 steps, and the range is 100 meters.

Amazing: The artifact confers a -4 bonus, with a range of 1 kilometer.

Dark Matter Attack

Once per hour, the hero can condense streams of dark matter into normal space and form them into bolts or blades. Attacks are made using a Modern Ranged Weapons skill check. Select a specialty skill (pistol, rifle, or SMG) appropriate to the device's form. Effects vary with the power of the artifact:

Ordinary: The attack inflicts

Non-Artifact Powers

The powers listed on these pages offer extraordinary powers via an unusual artifact or device. Another option is to use the powers and drawbacks here to create extraordinary heroes: arcane wizards, devout believers, or super heroes. For more information on how to design such characters and powers, refer to *Chapter 16: Optional Rules*.

2d4s/2d4w/d6m of En/G damage and has a range of 100 meters.

Good: The attack inflicts 3d4s/3d4w/2d4m of En/G damage and has a range of 200 meters.

Amazing: The attack inflicts 3d4s/3d4w/2d4m of En/A damage and has a range of 500 meters.

Dark Matter Control

The artifact creates a zone of influence in which dark matter reactions are either rendered impossible or violently destabilized. If the hero chooses to shut down dark matter reactions, all mass reactors in the area of effect cease to function. Any system powered by the mass reactor ceases operation.

If the hero chooses to destabilize the reaction, mass reactors in the area of effect overload within d6 rounds and explode as mass grenades (for small reactors) or as matter torpedoes (for shipboard mass reactors). If a mass reactor blows up inside a ship, that compartment takes the damage first, without the benefit of any armor roll.

An alien artifact actively using the power of dark matter attack can be affected by this power.

Ordinary: The power is usable once per day in a 20-meter radius.

Good: The power is usable four times per day in a 50-meter radius.

Amazing: The power is usable up to six times per day in a 1 km radius.

Dimensional Shift

The artifact pierces barriers to a parallel dimension of insubstantial mist. Distance is compressed by a factor of ten; a hero who uses dimensional shift and walks 3 or 4 kilometers emerges to find that 30 or 40 kilometers have been traveled in the "real" world. The shifted character

ignores all physical barriers. Effectively, this allows transit through walls by shifting, taking a step, and emerging again. It is impossible to see or affect the real world while shifted. If the shifted character attempts to emerge in a solid object, she reappears next to the object and suffers 2d6 points of stun damage.

Ordinary: The hero can shift herself and anything carried, for a maximum of 1 hour per day.

Good: The hero can shift herself and up to six additional characters (or 1,000 kg) for up to 4 hours per day.

Amazing: The hero can shift up to 20 characters or a mass of 20 metric tons (such as a small spaceship) for up to 12 hours per day.

Disintegration Field

The artifact causes matter in the affected area to break down into its component particles. Attacks are made using a Modern Ranged Weapons skill check. Select a specialty skill (*pistol*, *rifle*, or *SMG*) appropriate to the device's form. The field inflicts d4m/d6m/d8m of energy (En) damage with Good firepower. Neither armor nor defensive devices can deflect this beam. Only one creature or object can be targeted at a time.

Ordinary: The range is 20 m, and the power can be used once per day.

Good: The range is 50 m, and the power can be used every 6 hours.

Amazing: The range is 100 m, and the power can be used once per hour.

Displacement

This device bends light, causing the user to appear 2 to 4 meters from his actual location. When the artifact is activated, melee attacks and ranged attacks suffer a +2 penalty. Mental attacks are unaffected.

Ordinary: The power is limited to 3 rounds of use per day.

Good: The power is limited to 6 rounds of use per day.

Amazing: The power is limited to 12 rounds of use per day.

Elemental Conversion

This artifact allows its user to convert one element into another: nitrogen to oxygen, mercury to iodine, or lead to gold. It operates once per day.

Ordinary: The device has a range of 10 meters and can affect up to 10 kg (or 1,000 cubic meters of gas). The change lasts for 1 hour.

Good: The device has a range of

50 meters and can affect 100 kg or 10,000 cubic meters of gas. The change lasts for 6 hours.

Amazing: The artifact has a range of 200 meters and affects either 1,000 kg or 100,000 cubic meters of gas. The change lasts for 1 day.

Empathy

The artifact extends the user's perception to allow him to sense the emotional states of others. This power resembles the ESP—empathy skill available to Mindwalkers (see *Chapter 14: Psionics* in the *Player's Handbook*). The user doesn't expend psionic energy points.

Ordinary: The artifact's owner may use the power once per day, as if using the broad skill ESP.

Good: The user may make use of this power once per hour, as if using the specialty skill *empathy* at rank 1.

Amazing: The hero may use the power once per hour, as if using the specialty skill *empathy* at rank 6.

Energy Dispersal

When the wielder is struck by a weapon that inflicts energy (En) damage, the artifact negates some or all of the damage. The artifact's absorbent power is taken into account before an armor roll is made.

Ordinary: The device dissipates 4 points of damage. Twenty points can be dissipated each day.

Good: The artifact negates 6 points of damage. Thirty points can be dissipated each day.

Amazing: The device negates 8 points of damage. Forty points can be dissipated each day.

Gravity Generation

The device generates powerful, directional gravitic blasts that allow the hero to smash opponents to the ground, levitate objects through the air, or send enemies screaming into the sky. Another effective attack is to pick up something heavy and drop it on your enemies.

If used against a living creature, an attack roll using the Modern Ranged Weapons skill is required. Select a specialty skill (*pistol*, *rifle*, or *SMG*) appropriate to the artifact's form. The affected creature or object can be moved in any direction by 10, 20, or 30 meters per phase depending on the degree of success.

The gravity generator can be used for up to 12 phases per day.

Ordinary: A device of this power



A wondrous discovery, or evil unleashed?

can affect up to 100 kg at a range of 50 meters.

Good: The artifact can pick up 500 kg at a range of 100 meters.

Amazing: The artifact can manipulate up to 2,000 kg at a range of 200 meters.

Healing Touch

The device allows the hero to heal injuries. It resembles Biokinesis-heal (see *Chapter 14: Psionics in the Player's Handbook*), except that the hero can use it on others and doesn't spend psionic energy points.

Ordinary: The hero may use the power once per day as if using the broad skill Biokinesis.

Good: The hero may attempt healing once per hour as if using the *heal* specialty skill at rank 1.

Amazing: The hero may use the power once per hour as if using *heal* at rank 6.

Heightened Ability

The artifact provides extra Strength, Constitution, Dexterity, Intelligence, Will, or Personality, increasing the affected score by 1, 2, or 3 points for an Ordinary, Good, or Amazing power, respectively. This is most suitable as a graft, implant, or proce-

sure instead of something the hero carries around.

Hyper Adaptation

The artifact allows a hero to survive indefinitely in hostile conditions. He is able to breathe and ignore temperature, gravity, or radiation extremes, but might eventually die of thirst or starvation if he has no supplies.

Ordinary: The device can adapt the hero to any environment that deviates up to two grades from the hero's natural environment on the GRAPH system.

Good: The device can adapt the hero to any environment that deviates up to four grades; for instance, two grades of gravity and two grades of pressure.

Amazing: The artifact enables the hero to survive in any environment that deviates up to eight grades.

Immortality

The artifact drastically extends a hero's lifespan and renders him resistant to mortal blows.

Ordinary: The hero's natural lifespan is five times the norm. In addition, he gains a -2 bonus to any Stamina-endurance checks caused by mortal damage.

Good: The hero's lifespan is ten times longer than normal, and he has a -4 bonus to Stamina-endurance checks due to mortal damage.

Amazing: The hero's natural lifespan is effectively unlimited, and the hero automatically succeeds at all Stamina-endurance checks caused by mortal damage. If the hero runs out of mortal points, he is simply rendered unconscious, not dead. His life ends only if his physical body is annihilated. You can decide that a specific form of attack—such as poisoning by a particular substance, silver weapons, or exposure to a certain wavelength of radiation—may also extinguish his life.

Kinetic Control

The artifact allows its user to impart kinetic energy to or reduce the kinetic energy of any object within range. If she removes energy, the object slows or stops; if she adds energy, the target speeds up.

Kinetic control can be used to affect falling damage, increase the striking power of a thrown weapon or moving object, or counter the damage of a melee or unarmed attack that strikes the hero.

Ordinary: The hero can add 2

points to or subtract 2 points from the damage of any unarmed, melee, or thrown weapon attack within 20 meters. Or, the artifact may halve or double the speed of an object in motion with a mass of up to 100 kg. This power can be used up to 3 phases in a single day.

Good: The hero can add 4 points to or subtract 4 points of damage from impacts and weapon strikes within 40 meters, immobilize an object with a mass of up to 100 kg, or halve or double the speed of an object with a mass of up to 500 kg. The power can be used up to 6 phases in a day.

Amazing: The hero can adjust damage by up to 6 points, immobilize objects of up to 500 kg, or alter the speed of objects of up to 2,000 kg. The hero may use this power up to 12 phases per day.

Kinetic Dispersal

The device absorbs and dissipates kinetic energy—the energy of physical blows and impacts. Anytime the wielder is struck by a weapon that inflicts low impact (LI) or high impact (HI) damage, some of the damage is negated before the armor roll.

Ordinary: The device dissipates 4 points of damage. Twenty points can be dissipated each day.

Good: The artifact negates 6 points of damage. Thirty points can be dissipated each day.

Amazing: The device negates 8 points of damage. Forty points can be dissipated each day.

Magnetic Control

The artifact generates intense magnetic fields within the area of effect. Characters attempting to throw or fire metallic weapons in or through the area of effect suffer a +2 penalty to their attacks. The user can also choose to magnetize particular objects, causing metal objects to stick together. An opposed Strength feat check is required to fight the power of magnetism; the better degree of success wins.

Ordinary: The area of effect is a 10-meter radius, and magnetized objects are held fast with an effective Strength of 14. The artifact can be activated for a total of up to 5 rounds (1 minute) per day.

Good: The artifact's effective Strength is 16 over a 20-meter radius. The artifact can be activated for up to 10 minutes each day.

Amazing: The effective Strength is

20, and the magnetism affects a 50-meter radius for up to 1 hour each day.

Molecular Manipulation

The artifact allows control over an object or area's temperature by regulating molecular activity. Effects last as long as the hero continues to concentrate, and the artifact may be used up to three times per day. If this is used as an attack, the hero must score a successful hit using the Modern Ranged Weapons skill. Select a specialty skill (*pistol, rifle, or SMG*) appropriate to the device's form.

Ordinary: The hero can affect objects of up to 100 kg, or an area 10 meters in diameter, altering the temperature by 5° C (9° F). A living creature directly targeted by the artifact suffers $d6s/d6+2s/d4w$ of En/O from this treatment.

Good: The hero can affect objects of up to 500 kg, or an area 20 meters in diameter, altering the temperature by 10° C (18° F). A living target suffers $d6+2s/d4w/d4+2w$ of En/O damage.

Amazing: The hero can affect objects weighing up to 2,000 kg or an area 30 meters in diameter, changing the temperature by 20° C (36° F). This inflicts $d4+2w/2d4+1w/d4m$ of En/G damage to a living creature targeted by the effect.

Molecular Transformation

The artifact's potency allows for the instantaneous creation and deconstruction of molecular compounds from existing substances. For example, the artifact could break water (H_2O) into hydrogen and oxygen, liberate chlorine from salt, change breathable air into nitrous oxide or nitrogen dioxide, or render sulfuric acid (H_2SO_4) harmless by changing it into benign water, sulfur, and oxygen.

This artifact can generally make breathable air out of most atmospheres, neutralize acids or change liquids into acids, and make solid objects fragile or inoperable by changing their composition. The hero makes a Physical Science—chemistry skill check to see if she achieves the desired effect. Apply penalties according to your assessment of the complexity of the task, if desired. The power operates once per day.

Ordinary: The device has a range of 10 meters and can affect up to 10 kg or 1,000 cubic meters of gas.

Good: The device has a range of 50 meters and can affect 100 kg or 10,000 cubic meters of gas.

Amazing: The artifact has a range of 200 meters and affects either 1,000 kg or 100,000 cubic meters of gas.

Multitasking

This artifact normally takes the form of an implant or procedure. Multitasking provides a bonus to a hero's action check and allows him to do two related things at the same time without penalty, such as firing at an enemy while solving an astrogation problem in his head. The hero is still limited by his physical body; it's impossible to drive, shoot, and fix a broken radio all at the same time.

Ordinary: The hero gets a -1 bonus to action checks and can attempt two related actions (such as firing two pistols) at the same time without penalty.

Good: The hero gains a -2 bonus to action checks and can attempt two unrelated actions (such as firing a pistol and fixing a radio) at the same time without penalty.

Amazing: The hero gains a -3 bonus to action checks and can attempt up to three unrelated actions at the same time without penalty.

Omnidata Computer

The artifact offers rapid access to a vast storehouse of information. Since this is an alien artifact, the data may be completely beyond human experience—star charts of distant galaxies, plans for building devices of astonishing power, a complete catalog of planets in a certain sector, detailed maps of ruin sites, an index of every known lifeform within 1,000 light-years, or whatever you want.

This alien data can make for an outstanding set of adventure hooks, as the heroes try to build the teleportation platform from the artifact's data, find the ruined city from its maps, and so on.

The power level of the artifact describes its chances of holding relevant information on any particular topic related to its data. Ordinary devices have a effective Knowledge skill score of 12, Good devices have a score of 15, and Amazing devices have a score of 18.

Oxidation

This device causes extreme oxidation reactions in the area of affect, causing objects to oxidize (burn or rust). Living creatures are not susceptible to the reaction, but inanimate objects can be ruined quite quickly. Targeting requires a Modern Ranged Weapons check by the artifact's owner. Select a specialty skill (pistol, rifle, or SMG) appropriate to the device's form.

The user must decide to trigger the device's field either to corrode metal or rocklike objects or to ignite flammable materials such as wood, paper, or oil. The device may be triggered three times per day. The artifact inflicts damage equivalent to Good firepower.

Ordinary: The device inflicts damage of $d4w/2d4w/3d4w$ against inanimate objects within a radius of $6/4/2$ meters, with a 40-meter range.

Good: The damage is increased to $d4+1w/2d4+2w/d6+2m$ within a radius of $6/4/2$ meters.

Amazing: The range is increased to 200 meters and the area of effect to $12/8/4$ meters.

Photonic Manipulation

The artifact alters the characteristics of light in the area of effect, creating fields of darkness or illumination. For example, a user could set up a zone in which lasers did not function, surround enemies in impenetrable darkness, or cause objects to change color by reflecting light in a different frequency.

Ordinary: Range is 100 meters with a 10-meter radius area of effect. Total duration can't exceed 10 minutes per day.

Good: Range is 400 meters with a 20-meter radius of effect. Total duration can't exceed 30 minutes per day.

Amazing: Range is 1,000 meters with a 40-meter radius of effect. Total duration can't exceed 4 hours per day.

Postcognition

By activating this device, the user gains a mental vision of past events. The device may be activated no more than once per day, and allows review of anything she could see within 20 meters of her current position. With an Ordinary power, the hero may see up to 10 days in the past; with a Good power, as far back as a year; and with an Amazing

power, she can see anything that ever happened there.

Precognition

When activated, the device provides a brief mental vision or flash of something that will happen *unless the hero takes definite steps to prevent it*. If, based on his vision, the hero alters plans or changes a mode of investigation, the prophecy may not come true. The hero can't control what he sees: precognition is a hit-or-miss affair.

If you think that a development in the story may merit a precognitive flash, have the hero make an Awareness-intuition check. With an Ordinary success, the hero gets a vague impression of the future circumstances or surroundings that will allow him to recognize a dangerous situation or significant opportunity later on; with a Good success, he gathers specific cues that enable him to take steps to avoid danger or pursue opportunity; on an Amazing check, the hero's precognition presents him with a perfectly accurate sneak preview of the scene.

The power's quality provides a bonus to the hero's skill check: -2, -3, or -4 steps for Ordinary, Good, or Amazing.

Probability Control

The artifact manipulates the laws of chance, conferring incredible luck upon its user. This translates into a -1, -2, or -3 bonus (for an Ordinary, Good, or Amazing artifact, respectively) to any actions the hero attempts while the artifact is altering probability. The device can be activated once per day, and the effects last for $d6$ rounds.

Regenerator

The artifact confers astonishing recuperative powers upon the creature touched, repairing stuns, wounds, and mortal injuries at the rate of 1 point per round. The recipient regains 1 point in each damage category for each round of regeneration. The regenerative capacity of the device is determined by its power's quality: Ordinary regenerators can function for 6 rounds per day, Good devices for 9 rounds per day, and Amazing devices for 12 rounds per day. Lost limbs, paralysis, and other such injuries can be healed. The artifact can't affect dead creatures.

Resuscitator

This miraculous device restores life to the dead. When activated, it allows the deceased to attempt a Resolve-mental resolve check to struggle back to life. On an Ordinary success, the target recovers 1 mortal point and is considered stable; on a Good success the target recovers all but 1 mortal point and is considered stable; on an Amazing success the target recovers all mortal points and 1 wound point and 1 stun point.

When the resuscitator is applied, roll $d6$ for each mortal point repaired; this is the number of days that the resuscitator is inoperable as it recharges its energies.

The quality of the power affects the target's Resolve skill check. An Ordinary resuscitator gives a -1 bonus to his check, a Good artifact -2, and an Amazing artifact -3.

Star Transceiver

An instantaneous interstellar communicator, the artifact allows real-time conversations over dozens or hundreds of light-years. It's a device that functions through psionic energies, and thus the operator can speak to any person he's ever met. The chance of reaching the exact individual is based on an Awareness-intuition skill check by the user; if the hero fails the skill check, the hero can't construct an accurate psionic signature of the target.

Ordinary: The transceiver has a range of 10 light-years and allows up to 1 minute of conversation per day.

Good: Range of 50 light-years, 10 minutes of conversation per day.

Amazing: Range of 500 light-years, up to 1 hour of conversation per day.

Stealth Field

The artifact projects a field that bends electromagnetic energy, rendering objects invisible. Attempting to attack an invisible hero imposes a +3 penalty. Sound and smell are not affected, and thus the hero might be detected by those means. If the hero moves the field while it's active, it becomes visible as a heat shimmer (reduce the attack penalty to +2).

Ordinary: The field has a 1-meter radius and lasts 5 minutes per day.

Good: The field has a 4-meter radius and lasts 20 minutes per day.

Amazing: The field has a 6-meter radius and can be used up to 2 hours per day.

Telepathy

The artifact allows the hero to send and receive thoughts, communicating with the power of the mind. This resembles the Telepathy-contact specialty skill (see Chapter 14: Psionics in the *Player's Handbook*), except that the user need not expend any psionic energy points.

Ordinary: The artifact's owner may use the power once per day as if using the broad skill Telepathy.

Good: The user may make use of this power once per hour, as if using the specialty skill contact at rank 1.

Amazing: The hero may use the power once per hour as if using the specialty skill contact at rank 6.

Teleportation

The artifact allows instantaneous transport from one location to another without crossing intervening space. A hero retains her velocity when teleporting; teleporting in the middle of a fall doesn't cause sudden cessation of velocity. It's a bad idea for the user to teleport when moving quickly, such as when she is in a ship in orbit. The teleportation device is usable three times per day.

Ordinary: Range is 1,000 meters. The hero can only teleport what she can carry herself.

Good: Range is 10 kilometers. The hero can teleport herself and up to 100 kg of additional mass.

Amazing: Range is 100 kilometers, with up to 1,000 kg of additional mass.

Time Travel

This power should be viewed more as a story mechanic than a hero's tactical ability. Traveling in time is something heroes can do to advance the plot, not necessarily to defeat a specific enemy or achieve a tangible goal. If you bring this artifact into play, there are some questions you'll have to answer.

► Can the heroes change the past? What happens to their reality if they do?

► Can the heroes use information gleaned in the future to alter events in the present day? Is the future fixed, or will the heroes' actions change the future they visited?

► Are the heroes subject to time-travel paradoxes? Could they delete themselves by killing their own parents, or do the same to major villains in the present? See Chapter 13: Cam-

paign Design for more ideas about campaigns involving time travel.

Ordinary: The device allows travel up to 1 year into the past or future.

Good: The artifact allows travel up to 100 years into the past or future.

Amazing: The artifact allows travel to any time period, past or future.

Virtual Matter Creation

The hero can use this device to create temporary simulated matter, shaping structures or devices as desired. The hero can create a rope of virtual matter to climb out of a pit, a hang glider of virtual matter to escape from a cliff top, or a sword of virtual matter to attack a foe. As long as the creation doesn't have any mechanical or electronic components, the artifact can produce it.

Ordinary: The maximum mass of any object created is 10 kg, and the duration is no more than 10 minutes per day.

Good: The maximum mass created is 100 kg, and it lasts no more than 1 hour.

Amazing: The artifact can create virtual matter objects weighing up to 1,000 kg, and maintain them for as long as 6 hours.

Drawbacks

Almost all artifacts are flawed. You should be sure that even the most powerful artifacts do not disrupt the fun or balance of your campaign.

Blackouts

The artifact may cause its user to lose all of his stun points and go unconscious under certain conditions. Possible conditions include moments of stress, d6 hours after the artifact is used, or anytime a Critical Failure is rolled on a skill check.

Slight: The condition is unusual, occurring once per two or three adventures.

Moderate: The condition occurs about once every adventure.

Extreme: The condition is guaranteed to strike several times in the course of an adventure.

Compulsory Behavior

The artifact compels unusual behavior from the hero. He might be forced to return to a specific site from time to time, forbidden from eating meat or carrying weapons, repulsed by

certain situations or characters, or anything you think is appropriate. The condition is present all the time, but the hero may be able to temporarily suppress it by succeeding in a Will feat check.

Slight: The behavior does not seriously inconvenience the hero except under unusual circumstances.

Moderate: The behavior forces the hero to perform unwanted actions but rarely incapacitates him or removes him from the story.

Extreme: The behavior forces the hero to undertake actions clearly contradictory to his interests at least once an adventure.

Damping Field

The artifact must draw power from nearby sources. The drain can render energy weapons inoperative, immobilize powered armor, crash computer systems, and ruin delicate equipment. As a side effect, it tends to affect the hero and anyone nearby. Remember that the damping field is a drawback, not a beneficial power. Don't allow it to aid a hero more than it hinders.

Slight: The damping field has a 50% chance to activate when the artifact is used, shutting down all power sources in a 10-meter radius for 1 minute.

Moderate: The damping field has a 75% chance to activate when the artifact is used, shutting down all power sources in a 20-meter radius for an hour.

Extreme: The artifact periodically recharges itself even if it hasn't been used; any time the hero rolls a Critical Failure, the damping field shuts down all power sources in a 50-meter radius for a day. The drawback is 90% likely to activate when the artifact is used.

Decreased Ability

An unfortunate side effect of the artifact manifests as a mental or physical impediment to the hero, causing one of his Ability Scores to suffer. This is a persistent effect that hampers the hero even when the artifact isn't active or present in the hero's possession. If it's not clear which ability is most appropriate for the artifact to affect, roll randomly. The affected Ability Score is reduced by 1, 2, or 3 depending on the severity (Slight, Moderate, or Extreme) of the drawback.

**TABLE G56:
ARTIFACT
DRAWBACKS**

d12	Drawback
1	Blackouts
2	Compulsory behavior
3	Damping field
4	Decreased Ability
5	Degeneration
6	Disruptive consciousness
7	Energy cost
8	Infamous device
9	Leech
10	Mental instability
11	Power spike
12	Uncontrolled function

Degeneration

The artifact bombards its owner with radiation, rendering the hero susceptible to infection by alien microbes. It might even be toxic by extended contact. The hero must make Constitution feat checks to resist bouts of illness. See "Disease" in Chapter 3: Gamemasters in Action. Degeneration tends to weaken or incapacitate the hero periodically, and may even kill him in time.

Slight: The hero must check once per adventure or once per month to see if the artifact causes illness.

Moderate: The hero must check any time the artifact's powers are used, or any time he rolls a Critical Failure on a skill check.

Extreme: As above, but the hero suffers a +3 penalty to his initial Constitution feat check to resist the artifact's degenerative influence.

Disruptive Consciousness

When activated, the artifact inflicts acute pain and psychic trauma upon those nearby, resulting in a +2 penalty to all actions for d6 hours or the rest of the scene, whichever is less.

Slight: Only the artifact's user is affected by the drawback.

Moderate: The disruption affects all creatures within 6 meters when the device is activated.

Extreme: The radius of effect is increased to 20 meters.

Energy Cost

The artifact uses bioelectric energy, the natural energy fields of living organisms, to power its various functions. Each time the unit operates, it drains stun points from its user. For example, the star transceiver allows conversations measured in minutes; for each minute during which the hero uses this function, the hero loses stun points.

Stun points are lost at a rate depending on the severity of the artifact's flaw: 1, 2, or 3 stuns per time unit for a Slight, Moderate, or Extreme drawback.

Infamous Device

The artifact is an item of legendary powers, worshiped by rabid cults of assassins or stolen from a government. Someone will go to any lengths to retrieve it. Naturally, surrendering the device isn't an option, since the fellows who want it plan on harnessing its inestimable power for evil.

Slight: The villains pick up the hero's trail and make trouble once every two or three adventures, such as sending in hit teams or trying to have the hero arrested.

Moderate: Not an adventure goes by in which the hero doesn't have to contend with someone taking a shot at getting the artifact. Even if the sworn enemy doesn't appear, some opportunistic punk is going to try to steal it or pass word of the hero's location back to the heavyweights.

Extreme: As above, except that the artifact includes some feature or property that makes it impossible to conceal. It might radiate a homing signal that the villains can follow.

Leech

This resembles the Energy Cost drawback (see above), but the artifact randomly selects a life force near the hero (a friend or companion) for power and drains wound points instead of stun points.

Mental Instability

The artifact's influences can unbalance the hero's mind over time. The hero must make periodic Resolve-mental resolve checks to resist bouts of depression, paranoia, mania, or catatonia. The result depends on the hero's Resolve check:

Amazing or Good: The hero suffers no ill effects.

Ordinary: The hero is afflicted by severe depression, borderline paranoia, or hysteria. The effects last for d4 days. During this time, he suffers a +1 penalty to the use of any Intelligence, Will, or Personality-based skills. In addition, any time the hero gets a Critical Failure, he becomes disabled for the rest of the scene.

Failure: As above, except that the duration of the attack is 2d4 days, and the penalty is +2.

Critical Failure: The character is totally incapacitated for d4 weeks due to raging paranoia, raving lunacy, or hopeless desperation. Continuous care and supervision is required.

Slight: The hero must check once per adventure or once per month.

Moderate: The hero must check any time the artifact's powers are used, or after any Critical Failure on a skill check.

Extreme: As above, but the hero suffers a +3 penalty on his Resolve skill check.

Power Spike

The artifact's alien energies cause equipment to short out or fail. Any powered device the hero carries suffers a complete shutdown any time she fails in an attempt to use it. A failed attack shuts down the hero's energy weapon, a failed Computer Science skill check knocks out her computer, and so on. This power spike could also extend to ship systems the hero is manning in combat or sensitive devices that a companion is attempting to use in the hero's presence.

Slight: The device in question is deactivated for d6 hours.

Moderate: The device is damaged and won't function until repaired.

Extreme: The item or console is ruined and must be replaced.

Uncontrolled Function

The artifact has the tendency to activate its powers at inconvenient times, and to ignore the hero's desperate efforts to activate it.

Slight: There is a 1 in 4 chance that the artifact simply refuses to function when activated. Any time its user rolls a Critical Failure during a skill check, the artifact has a 1 in 6 chance to activate in some erroneous or harmful manner.

Moderate: As above, but the chance of random activation is 2 in 6.

Extreme: As above, but the chance of erroneous activation is 3 in 6.



CHAPTER 13

CAMPAIGN DESIGN

One of the Gamemaster's most creative exercises is the construction of an imaginary world or universe. In this realm, you decide everything. What genre does your setting fall into? Which Progress Level or technical innovations can define it? What sorts of aliens are present? How is the world organized? Who's in charge, and why?

This chapter offers general advice on building an exciting setting and administering it over the lifetime of your campaign. Once you're familiar with the concepts presented here, you'll move on to *Chapter 14: Campaign Architecture* for a discussion on putting together the physical details of your setting: sectors, stars, and planets.

DESIGNING A CAMPAIGN

How do you begin creating a campaign setting from scratch? One approach could be to start with a single planet, or even one area of a planet, and build outward, eventually creating an entire galaxy. Another option is to sketch out some concepts about the kind of campaign you want to run, then slowly sharpen your focus until you've fleshed out the setting. Your world becomes real with its introduction to your players, the heroes they create, and the adventures you build for them.

Fortunately, you don't have to decide everything before the first game session. As you and your players weave a series of cooperative stories by playing adventure after adventure, the campaign grows and changes, developing in directions impossible to predict.

Here's a short list of some of the options to consider when preparing a campaign setting:

- ▶ Time frame, genre, tone, and Progress Level for the campaign.
- ▶ Optional rules or rules customizations such as new hero species, expanded skill selections, equipment modifications, and other issues relating to character creation.
- ▶ The storyline or conflict for the heroes to explore during the game.
- ▶ The mission, common background, or bond that unites the heroes.
- ▶ The cast of interesting supporting characters, including major villains and allies.
- ▶ The major organizations, na-

tional authorities, aliens, and other powers that pull the strings in the setting.

- ▶ Primary threats in the setting.
- ▶ A map of the setting's area, marking major systems, planets, cities, and national boundaries. (This topic is examined in detail in *Chapter 14: Campaign Architecture*.)
- ▶ The initial adventure for the setting, along with a few adventure triggers that can expand on the campaign's theme. (See *Chapter 15: Adventure Design*.)

Time Frame

You can play just about any setting you can imagine with the ALTERNITY

game, although it was designed specifically to accommodate science fiction settings. Within the realm of SF, you can choose one of three time frames: contemporary, near-future, or far-future.

Contemporary SF

A contemporary setting uses the materials set forth in this book for a civilization at Progress Level 5. This is, for most intents and purposes, the world of today. Everything you know from real life can serve as the backdrop for this campaign: modern technology, daily news, real-world locations, political figures, media stars, and much more.

Of course, you can add any num-

Getting Organized

You may find a notebook or folder useful for keeping all of your campaign material in one place. Many Gamemasters prefer a binder to store all of their notes and maps. Something with plenty of pockets is handy, because you'll want plenty of places to stash supporting cast character sheets, maps, handouts for the players, and other materials. Here's a short list of some things to include in your notebook:

- ▶ Maps of known space, the local sector, important star systems, major worlds, cities, stations, or outposts.
- ▶ Character sheets for the heroes, major allies, and villains.
- ▶ A log or short form for minor supporting cast members.
- ▶ A collection of notes detailing rules changes, new equipment, species, and other customized touches for your campaign setting.
- ▶ Notes on the politics, major players, customs, and resources of the sectors, star systems, or worlds you expect the heroes to visit.
- ▶ Notes on the calendar used in the setting, if you plan to keep track of time in your game.
- ▶ A record of adventures completed by the heroes, including notes on allies, enemies, wealth, gear, and achievements.
- ▶ A players' wish list to keep track of the heroes' goals.
- ▶ Notes on sites of interest, adventure triggers, or situations that you can develop into ready-to-play adventures.

ber of twists to the contemporary setting. These twists depend on the genre (see below) that you plan to incorporate into your campaign. A modern-day technothriller, for example, would use high-tech weapons and spy gadgets. Providing a few items from PL 6—whether in the hands of the heroes, in research facilities run by villains, or secretly under development by a mysterious corporation—can make a contemporary campaign more interesting. Or, you could play a contemporary setting but incorporate psionics and mindwalking abilities for an entirely different flavor.

Near-Future SF

A near-future campaign is set at Progress Level 6. Like the contemporary setting, the near-future campaign seems real because it's extrapolated directly from the events and conditions of today.

What's your vision of tomorrow? You can take a pessimistic approach and create a dark, troubled world of twilight. The genres of cyberpunk and combat SF are examples of the pessimistic aspect of the near future. Or, you can lean toward optimism and create a world founded on humanity's noblest elements. Colonization of the solar system, for instance, can serve as the basis for an optimistic near-future campaign.

Far-Future SF

A far-future campaign takes place in a civilization at Progress Level 7 or higher. As with the near-future, the far-future setting has the ability to showcase a triumphant destiny or a terrible fate in the days ahead. Far-future campaigns may feature faster-than-light travel, galactic empires, exciting exploration of the unknown, and notions of ultimate destiny.

Once you select a time frame, it's easy to decide on the general availability of equipment and prevalence of technology. More information on Progress Levels appears later in this chapter, and in Chapter 9 of the *Player's Handbook*.

Genre

Science fiction encompasses a number of distinct genres that represent the types of stories you can tell. You might enjoy hard science fiction, where the reality of the campaign is strictly extrapolated from current

technology. Or you might favor a science fantasy approach, where time and circumstance warps the nature of human capabilities, and technology works like magic. Alternate history, space opera, and cyberpunk—these and other genres all share common roots in science fiction, but they also possess markedly different characteristics.

Once you have a genre in mind, the plots, themes, and possibilities of your setting become more apparent. The major genres of science fiction are described below. If any particular genre interests you, feel free to research it further by reading books and viewing movies that cover its themes.

Alternate History

An alternate history campaign is one based on the "fact" that a single key event or a series of events has unfolded differently from what actually happened in our real world. As a result, the fictitious social, political, and/or technological landscape of the fictional world has changed dramatically. Choose a significant and well-known event upon which to base your alternate history, and your players can appreciate the extent of historical drift in your world.

This genre works well in contemporary or near-future campaigns, where you can explore the ramifications of the change. For example, you could decide that the Roman Empire never collapsed, and thus the Dark Ages never befell Europe. The modern world in such a setting could be a high-tech version of the Roman Empire, a civilization locked in a Pax Romana that has existed for more than two thousand years. Maybe political division is only now, in the 20th or 21st century, threatening to rend the Empire into pieces. . . .

You can also use the alternate history genre to send heroes to parallel dimensions—worlds that look much like their own, with at least one significant difference. Your players could be scientists in control of this exploration. Or they might be heroes lost in the dimensions, working to find a way home.

The exact nature of an alternate history campaign depends entirely on the divergence point—the place in history where your imaginary world separates from the familiar one. What if a scientific development reshaped history? Imagine the dis-

covery of space travel in the 1850s, or decide that human contact with star-faring civilizations occurred in the middle of the Renaissance. If the divergence point creates a history in which humans come into contact with aliens—for example, a world where the fraal settled on Earth decades or centuries ago and have been interacting openly with the humans around them—you might allow nonhuman heroes to exist.

Look for unexpected changes that your divergence may cause. For example, it's easy to imagine that France never sold the Louisiana Purchase to the United States. But what would this mean for prominent Americans born in later years in the states west of the Mississippi?

If you want to design your setting in a (relatively) short period of time, an alternate history campaign offers a few distinct advantages—especially if you set it in contemporary times. Basing your campaign on a contemporary alternate Earth reduces the amount of background work you'll have to undertake. Since your players have an obvious familiarity with the setting, you won't have to explain every single aspect of your world. In fact, you'll just have to detail those elements of the alternate world that differ from the real one.

Many alternate history stories set in the present day use contemporary technology (PL 5). If the divergence accelerates or derails civilization and technological development, the Progress Level may change too. Naturally, if your campaign occurs at a different time in the alternate Earth's history, the technology should vary accordingly.

Colonization

A colonization campaign places heroes in the role of explorers, frontiersmen, pioneers, and survivors. They are among the first brave souls to reach and settle a new world. The colonization effort might be the first attempts to build a lunar site, an outpost on Mars, or a base among the Jovian moons, or it might deal with the settlement of a new star system.

The world the heroes colonize can vary widely. Perhaps it's an inhospitable rock in need of drastic terraforming (if it can be terraformed at all). Or it might teem with life—including other sentient species.

The colonization genre is a rich premise for an SF campaign. A vari-

ety of crucial missions suggest themselves: mapping the planet's surface, cataloging native lifeforms, exploring alien sites or ruins, and weathering unexpected natural hazards. There's the possibility of intrigue, sabotage, or strife among the colonists. What new society will arise far from home? If the heroes lead the colony, they must choose sites for settlements, figure out how to exploit existing resources, and possibly even undertake some social engineering as they try to organize and govern.

A colonization campaign assumes that space travel is available. It may be a near-future technology consisting of chemical rockets and one-shot landers, a far-future generation ship, or even a starfaring vessel that drops the heroes on a planet and then leaves to ferry other colony teams to remote destinations. However, it's possible that humans travel to new worlds by even more exotic means—for example, a vast spaceship could arrive and invite humans to journey to other stars, or scientists can find an ancient technological relic that opens a portal across space to another world.

The technologies involved cast a heavy influence over the nature of the colony. How much support does it receive from the parent world? If faster-than-light travel is impossible, generations might pass before the colonists hear from their home world again—if they ever do. What kind of supplies do the heroes have with which to start their colony? Penal colonists, deportees, or shipwrecked populations might start with nothing more than the wreckage of their landing pods. Even well-supplied colonists might face crucial shortages and irreplaceable equipment. Once these items break down, the heroes must wait until a supply ship arrives or make do without.

While you can build an exciting campaign around the heroes' struggle against a lifeless, inhospitable world, the most interesting colonization stories deal with the settlement of worlds where life already exists. What is the native ecology? Does the world contain creatures dangerous to humans? You're missing out on some fun if you decide that plankton and herbivores represent the sum total of indigenous life on the colonists' new world.

Another exciting aspect of the col-

onization of life-bearing worlds involves the presence of sentient creatures. How do these "aliens" (actually, the *natives*) feel about their new neighbors? What kind of strange civilization or cultural rituals do they possess? These are important questions to answer when designing a colonization campaign.

If you're dealing with the near-future settlement of Earth's solar system, in all likelihood you have a humans-only campaign. But combine the colonization setting with an alternate history premise that the *frail* have already revealed themselves to humanity, and you have a situation in which members of both species might cooperate to tame an unsettled world. If the planet to be colonized already contains sentient creatures, players might be able to create native heroes as the story develops. Mutant heroes may work well in colonization SF, especially if the planet they're colonizing requires humans to be modified or enhanced in order to survive.

Combat

Combat and military activity is one of the most common science fiction genres. In a combat SF campaign, heroes are members of a fighting force engaged in futuristic warfare or conflict. They may be bughunters who clean out alien infestations on distant stations and worlds, part of an elite strike force engaged in a war against alien marauders or rival human powers here on Earth, or high-tech mercenaries who accept contracts to fight for various causes.

You can organize your players in any way that fits with the storyline of your campaign. However, three of the most common organizations in combat science fiction are the fighter squadron, the infantry platoon, and the mercenary company.

As pilots and supporting members of a fighter squadron, the heroes use cutting-edge technology. They may serve on a planetary base, a space station, or a carrier of some kind. On occasion they may undertake special duties such as long-range scouting, diplomatic missions, or weapons testing. Fast-moving fighter craft engaged in ship-to-ship combat should play a major role in most combat adventures.

In an infantry platoon, heroes see their enemies through rifle sights. While most pilots are officers—or

specialists—who receive privileges, the typical infantry soldier is a low-ranking, enlisted grunt who sits at the bottom of the chain of command. Marines may function as special security teams on ships or stations, serve as garrison soldiers or police on frontier worlds, or work as scouts who reconnoiter abandoned outposts, wrecked colonies, and possible enemy bases.

Heroes in mercenary companies may find themselves fighting in the bloodiest frontiers of space, piloting a fighting vehicle, or going toe to toe with the most bizarre alien enemies. Depending on the laws and rules governing the employment of mercenaries, heroes may be slave soldiers, crude primitives, or wealthy and elite professionals.

A combat SF campaign based on a group of space law enforcers can also work. In this campaign, heroes travel the galaxy dispensing justice with mass pistols and stun batons.

While you might expect Combat Specs to dominate a combat SF campaign, they don't. Remember, soldiers need officers (Diplomats), scouts (Free Agents), and armorers and medics (Tech Ops). Every profession has its uses during warfare.

Combat SF is usually hard, grim, and realistic. Warfare in the future isn't pretty, and adventures often revolve around mere survival instead of victory. However, even the most bloodthirsty of heroes can't put up with an endless diet of firefights and secret raids. If you want to base your campaign on this type of scenario, create important storylines that move the heroes out of the trenches from time to time.

For example, a marine transport might crash on an unidentified planet, so for a few adventures the heroes explore the new area, investigate the native civilization, and generally get a break from the continuous fighting. Similarly, military personnel might receive special assignments, shore leave, or a transfer to different posts behind the lines. Use devices such as these to keep the heroes together and alive over the course of a dangerous campaign.

Combat campaigns have the advantage of providing heroes with an immediate and obvious goal. Players know their heroes' place in the universe, and most of the time the heroes have a clear mission to follow. In addition, you have the chain of

command to guide the actions and adventures of the heroes—when they're ordered to explore an asteroid, they usually have little choice but to accept.

One advantage of the combat campaign is that it can be based in any time period, at any Progress Level.

Cyberpunk

Cyberpunk is science fiction with a particular attitude. "Cyber" refers to cybernetics: the melding of the biological and the mechanical. In this way, scientists enhance the human body with mechanical augmentations and even biological engineering. "Punk" refers to the attitude that infuses this setting, one that combines alienation and disillusionment, as well as an aggressive disdain for authority.

In a cyberpunk future, industrial and political blocs exist globally instead of nationally, and information networks—especially computer networks—control everything. Virtual reality, cyberspace, and the ability to project a disembodied consciousness into the world's networks are central to the concept. Media overload and an uncomfortable density of information also characterize the genre.

Adventures can range from covert actions, espionage, and corporate sabotage, to data theft, murder mysteries, and military SF—all within the framework of a dark, near-future world where technology has merged with humanity, perhaps to the detriment or elevation of both.

Most cyberpunk campaigns take place in the near future, though elements of the genre could appear in any Progress Level. While most of these campaigns offer a dark dream of the days to come, there's no reason you can't create a reasonably bright and optimistic cybernetic setting. Obviously, this type of campaign should utilize the rules for computers and cybernetics detailed in the *Player's Handbook*.

Exploration

Exploration of the stars is usually the first theme people think of when the words "science fiction" are spoken. In this type of campaign, heroes adventure out on the fringe of human space, explore new worlds and new civilizations, and aspire to challenge the great unknown.

Although you could run a fine ex-

ploration campaign based on the charting of the local solar system, this genre usually aims higher, encompassing the stars. The heroes may be a small survey team on a tiny scout ship, the leading officers on a huge star cruiser, independent traders trying to find new markets and resources, or even a specialized contact or landing team under the command of a ship's captain.

An exploration campaign is episodic in nature. Each new world or star system is an adventure waiting to happen, a neat and self-contained package that the heroes can deal with and (usually) leave behind. While a great number of adventures in this kind of setting can involve contact with new phenomena or alien societies, the heroes may occasionally take on different missions. For instance, an interstellar government could order a scout ship to convey a politician to a remote post because the ship happens to be in the right sector at the right time.

Another aspect crucial to the development of an exploration campaign is the creation of the authority, guidelines, and restrictions that govern a ship's movements and missions. If the heroes aren't the only crew members of their vessel (for instance, they're a five-person scouting team traveling on a starcruiser with a crew of 500), you'll need to define the key supporting cast members who are likely to interact with the heroes on a regular basis.

You could offer up a hard science exploration campaign involving charting and survey missions and paying careful attention to habitability zones, spectral classes, and the rules of planetary formation detailed later in this book. In such a case, many stars in the galaxy will be next to useless from a human point of view—although substantial concentrations of rare minerals might warrant prospecting.

On the other hand, you can play an exploration campaign as science fantasy, unveiling marvel after marvel as the heroes encounter time portals, advanced civilizations, and worlds that illustrate a meaningful human condition. In any event, a team of heroes should include at least one Diplomat, since meeting new races could constitute one of the chief features of the campaign.

Interstellar travel is usually a must for this type of setting, and

hence PL 7 is probably the minimum base Progress Level. A PL 6 exploration campaign, in which travel takes place at sublight speeds, is possible, but it will have a far different scope and flavor, because such a campaign centers on the exploration of a single star system.

Future Earth

The future Earth story examines a possibility. What's waiting for us in the centuries or millennia to follow? A nuclear or ecological catastrophe? An alien invasion? Dangerous, or wonderful, new technologies? Will humanity remain the dominant species on the planet?

A future Earth campaign can involve an astonishing variety of conditions, technologies, and heroic roles. The entire world may have blown itself back to squalid savagery by nuclear war. Or maybe a select group of humans lives in an age of grace and learning, hidden away from the apocalypse that devastated the rest of the world. Even if humanity's physical condition advances drastically, new social problems may arise to form the focus of a campaign. For example, a world without sickness, hunger, or hardship could be ravaged by the tyranny of dictators. Repairing such a broken utopia can be quite a challenge, even if the heroes never confront raw physical danger.

Building a future Earth is much like creating an alternate history campaign. You don't need to postulate any major divergences in history; events to the present day are unchanged. Instead, extrapolate a key event, development, or situation that defines the world of the future, and then build the campaign to fit.

For a low-tech survival campaign, think about a future in which our modern society declines in both knowledge and civilization. If you want aliens in your future Earth campaign, think about how they traveled to Earth, what happened when they arrived, and how they co-exist with humanity. Be careful of creating worlds that are too advanced or civilized; heroes need frontiers and enemies—in a society without these challenges, there's little for them to do.

A timeline is a good tool for building this sort of campaign. It's nothing more than a list of dates, beginning with the modern day and working



In this futurity, fruit is worth its weight in gold

forward to the campaign's present day. If your future Earth has endured World Wars III and IV, make a note about when and why these wars were fought.

Influential people, landmark legislation, international affairs, and major new inventions probably deserve notations on your timeline—especially if they're completely imaginary or speculative. It's easy for your players to accept the introduction of superconducting technology, since scientists are currently exploring this field. But if you want players to accept teleportation and antigravity, you should explain how these technologies came to be—not in painstaking scientific detail, but at least in general terms that makes their development believable.

When deciding on the Progress Level at which to set a future Earth campaign, think about the history you've created. Do you see the world going forward, or sliding back? Major catastrophes, diseases, or economic collapse may result in a reversion to more primitive technologies. It's theoretically possible, for instance, for a future Earth setting to be at PL 5, or even PL 4, even though

civilization had advanced to PL 6 at some time in the past.

Horror

The premise of horror SF centers on the presence of dark creatures and phenomena inimical to human life. Heroes are frail and vulnerable in the face of terrible, unintelligible evils, and only quick thinking and luck can preserve their lives.

Apply the conventions of traditional horror to a science fiction setting: alien invaders that insidiously possess humans through subtle or overt means; heroes stranded in an isolated area where fear and terror can breed; monsters that are otherworldly in nature or the result of a scientific experiment gone awry. Technology has a dark side, and you can use this to great effect in a horror SF setting.

In order for a horror story to work, the plot must involve threats that are beyond human understanding. You should place the heroes in a position to encounter these threats and temporarily defeat them, or at least survive them. Players should never be certain of the outcome; as far as they know, the creatures and phenomena

in your campaign have the ability to kill or maim their heroes, or drive them insane, in each and every game session.

It's your job to create situations in which the players would never want to find themselves. In a good horror game, your players should experience twinges of fear and unease. The very notion of finding themselves in the same boat as their heroes should send shivers of fright down their spines. Make use of maddening anticipation, foreshadowing of a doom too horrible to imagine, and false shelter or security from a threat. Above all, create dark, dismal, and unnerving settings in which fiendish plots can unfold.

The horror SF campaign can take many forms. For example, you can create a standard exploration or colonization scenario in a dark universe. Imagine the plight of colonists stranded on a world with ancient evils slumbering in alien ruins, stirring in hunger once the heroes disturb their rest.

Or, add the backdrop of cosmic horror to any other campaign setting. A utopian society that discovers forces and creatures of astonishing

power and malevolence lurking in the galactic shadows makes for a truly horrifying setting. Horror SF stories can also involve alien creatures that invade the relatively close confines of a spaceship or space station. An alien predator species could come to Earth and begin hunting and killing humans for sport.

Horror is difficult to sustain in any venue, but especially so in a science fiction setting. A campaign usually encompasses the continuing adventures and advancement of the heroes from story to story—but most horror stories are about *survival*. Finding a way to let the heroes live in order to adventure again is difficult. Doing so while maintaining the credibility of a horrible threat or monster is even more challenging. After all, if the force or creature in question wasn't tough enough to destroy the heroes the first time around, why should they be afraid of it? In order to maintain tension and terror, you must find a way to keep the heroes in the line of fire while allowing the threat to evolve with time.

The availability of aliens as heroic characters instills a sense of wonder in a game setting. However, in a horror campaign, it's often a good idea to downplay the marvelous. Therefore, you might want to limit the number of alien species available to be used for heroes. If you decide to use the standard aliens described in the *Player's Handbook*, make them more mysterious and inhuman. Perhaps they have goals and desires that the human heroes find incomprehensible or threatening. Or they may exist as savages or indentured servants deliberately denied technology—fostering the impression of a superior humanity in a well-ordered universe.

Any of the game options—mutants, psionics, and cybertech—are appropriate to this setting, but in horror SF every benefit should have a hefty price tag. If a player wants to run a Mindwalker hero, make sure that the hero runs across psionic terrors that can slice his mind to ribbons. Make Mindwalkers, mutants, and cyborgs the subjects of hatred and fear in a horror setting—not only do they have to worry about the insidious threat against which they battle, but they must also protect themselves against a society that views them as horrors themselves.

In a horror campaign, the irra-

Time Travel in the Campaign

One of the oldest themes in science fiction, time travel allows Gamemasters to move heroes into the past to experience a bit of history firsthand, into the future to see how things might turn out, or even into alternate dimensions where critical events developed along different paths.

While time travel is undeniably a genre within science fiction, it's not really a type of setting you can use for an *ALTERNITY* campaign—rather, it's a form of fictional technology you can use to expose heroes to environments that may be (and usually are) vastly different from their world of origin.

If you decide to make time travel a feature of your campaign, you'll need to establish some ground rules for how the phenomenon works and how the heroes can use it. Clearly, heroes can't be allowed absolute control over the technology; if they could travel to any time and place they wanted to, it would be impossible for you to prepare background information for every locale they might visit.

In the literature of science fiction, time travel is often limited in some fashion—obviously, for the sake of the story the author is telling. You can attach limitations to time travel for the sake of your story, too. Maybe it's possible to travel into the past but not into the future, or vice versa; maybe the temporal distance that can be covered is only a decade, or a century. Maybe any journey through the time stream is limited in duration—after an hour, or a day, a traveler is instantaneously returned to his or her original locale. The important thing to keep in mind is that time travel is first and foremost a tool for you, and only secondarily a tool for the players and their heroes.

After you've decided how time travel works in your campaign, you need a reason for the heroes to time-travel repeatedly. Perhaps they act as time police, responsible for ensuring that certain events take place. Maybe they seek to stop evil time travelers from disturbing the time stream. They could work as historians determined to study critical points in history firsthand. Finally, they may reside in an extra-temporal place or society, natives of a city outside time. While we tend to think of time-travel stories as limited to the planet Earth, there's no reason that they couldn't take place anywhere in the galaxy.

Time travel doesn't fit the normal Progress Level track, so you'll need to choose a likely background for your time-traveling heroes and set the campaign there. The genre probably works best when the heroes' world of origin is at Progress Level 5 or 6; more advanced technologies feature elements such as interstellar travel, which may detract from the centerpiece of your campaign.

tional intrudes into the rational world of science. With this intrusion comes fear, and thus SF and horror collide in fascinating and disturbing ways. Many times, this collision is the result of supernatural occurrences—often buttressed by a rational, quasiscientific explanation. Other times, it's just the result of technology employed without moral guidelines or restraint.

You can set an Earth-based horror SF campaign in almost any time and age—although you might consider it an alternate history campaign if it's set deep in the past. Since technology grows more powerful at higher Progress Levels, you might deliberately disallow, suppress, or pervert key technologies the heroes could

otherwise use. For instance, star travel may be much more dangerous or uncertain in a horror SF campaign than in a normal exploration or space opera setting.

Space Opera

Space opera deals with epic themes, such as the struggle of civilization against ancient evils, alien invaders, or sinister galactic empires. Meanwhile, the characters and stories preserve a tight focus by using these great ongoing struggles as a backdrop. For example, you can create a story around heroes who fight in a war, work as spies, or engage in various missions for their cause. The backdrop is an epic tale of interplanetary or interstellar conflict.

Space opera doesn't have to be full of fleet commanders and bright, shining heroes. It can be grim and realistic, driven by characters both human and flawed.

It's easy to keep a space opera campaign on track, because at the heart of the setting is a clear enemy or hostile power against which the heroes must stand. Even if they're not leaders and rulers, heroes will find themselves at the center of pivotal events, their actions helping to determine the outcome of the great conflict between good and evil.

Space opera deals with the big picture: a galaxy-spanning empire, an immediate and overwhelming problem to threaten the heroes, and plenty of elbow room for the heroes to bounce from world to world in the pursuit of their goal. Space opera characters and settings are generally larger than life, caricatures designed to capture one aspect or trait and magnify it for the story. Instead of Earthlike worlds with a mix of terrain, space opera features venues such as the Lava Planet, the Jungle Planet, and the Ice Planet.

The presence of a clear conflict doesn't necessarily force everyone to take sides. Many characters may have questionable loyalties, uncertain motivations, or personal agendas. Even in the face of galactic war, smugglers, crime bosses, or corrupt governors might try to make as much money as possible from the conflict. Having the heroes deal with these secondary threats or interests may be a welcome diversion from coping with the omnipresent danger or conflict that drives the campaign.

In the typical space opera, alien species are abundant. Feel free to introduce as many weird aliens as you like. And since this type of campaign is so diverse, you can modify the rules any way that makes sense. If you want to limit or restrict the game options mentioned in the *Player's Handbook*, stipulate that heroes who choose these options must belong to certain species or organizations. For instance, cybernetics may be expensive or illegal in most human societies, so a hero with cybernetic implants might necessarily be a representative of a particular planet that has a relatively relaxed attitude toward cyberware.

When elements of science fantasy are added to space opera, the setting becomes even wilder. Such cam-

paigns cross into the realm of pulp fiction—where magic exists beside high-tech wonders, and a hero wields a wand in one hand and a laser pistol in the other. Consider using the FX system detailed in *Chapter 16: Optional Rules* in this type of campaign.

Space opera campaigns require at least Progress Level 6 technology. Generally, you're probably better off designating Progress Level 7 or 8 for such a campaign. Don't forget that isolated areas of inferior—or superior—technology may exist.

Superheroic

Comic books feature all kinds of science fiction elements—secret research labs, experimental energy weapons, powered armor, aliens from distant worlds, and dimensional invaders. A superheroic SF campaign assumes that heroes are individuals who, because of special and even unique abilities, stand head and shoulders above the most talented normals.

You can easily run a low-powered superheroic game using the standard rules and options presented in the *Player's Handbook*. For more powerful superheroics, use the FX system detailed in *Chapter 16: Optional Rules*. Assume that only a few supercharacters can possess these abilities, while the rest of the world contains supporting characters with none of these powers.

The superhero genre features one particular plot device that's indispensable—the superhero team. Many of the most famous superheroes are part of superhero groups, combining their efforts to stop various villains and threats that trouble the rest of the world. Superhero teams often share a base facility, while traveling throughout an area to answer calls of need.

While many superhero tales are set in a world much like contemporary Earth, you shouldn't feel limited to the late 20th century—a World War II time frame could work just fine. Or, you can advance your story into the future, working superheroes into a galactic espionage or space opera setting.

Typically, superheroes and supervillains have access to extremely advanced technology compared to their society's standards; therefore, allow heroes to make use of some equipment one or two Progress Lev-

els ahead of the rest of the world—especially Tech Op heroes who build their own superadvanced gadgets.

Technothriller

A technothriller campaign usually takes place in a world much like our own. It's a modern or near-future setting, without the flashy technology of star travel and antigravity. Of course, heroes may have marvelous gadgets and devices to help them do their job—action heroes and super-spies always have access to gear that's more advanced than stuff you can find at the local electronics shop.

The best way to bring heroes into this kind of campaign is to enlist them as secret agents working for an intelligence organization. The organization may be your rendition of something realistic, such as the CIA, or a fictional shadow-intelligence agency. As top field operatives, the heroes receive orders that they must carry out using their own ingenuity.

In a technothriller setting, heroes operate in a shadowy world of charismatic enemy spies, assumed identities, and mysterious contacts. They get involved in some real-world espionage activities from time to time, such as shadowing suspected informants, going on surveillance missions, and wading through computer files or financial records to track down payoffs and expose fake business fronts. Discovering the identity and identifying the vulnerability of an enemy should be a large part of such a campaign—as well as daring rescues, sabotage, or other covert-action missions for the combat-oriented players.

Aliens don't play lead roles in the typical technothriller setting. In the classic form of this campaign, the hero is smart, tough, charming, quick—and human. Mutants and Mindwalkers may be appropriate for one-of-a-kind superagents, but be careful about setting such characters loose in an otherwise normal world. Cybernetics may exist on a modest level, in the form of special devices built for agents.

A near-future technothriller could take place in the early days of solar system colonization. In the far future, suave corporate spies could ply their trade in the business rivalries of a galaxy-spanning society.

Tone

After you've determined the time frame and the genre of your campaign, the next step is to decide its tone. The three different shades of tone that you can use are *realistic*, *heroic*, and *superheroic*.

Realistic

A realistic campaign can be deadly for heroes, because they possess relatively little power. Certain types of technothrillers, colonization campaigns, and most horror SF settings benefit from this tone. In a realistic campaign, heroes are normal people thrown into extraordinary situations. To reflect this circumstance, they receive only 48 points to distribute among their six Ability Scores.

You can change other aspects of the rules to make the campaign setting even tougher. For instance, you can lower the Ability Score maximums for humans to 12. You can declare that heroes aren't entitled to the profession-based cost reductions when purchasing skills, so that a Combat Spec pays as much for Melee Weapons as a Diplomat does.

Finally, the optional rules for mutants, psionics, and cybernetics are unavailable in a realistic campaign.

Heroic

The heroic campaign is the assumed base for an ALTERNITY campaign; the rules in the *Player's Handbook* are written to accommodate this tone of play. In a heroic campaign, you can use all the rules that you feel comfortable incorporating into your game world—including professions and their associated benefits, 60 points for Ability Scores, and whichever of the optional rules fit the stories you want to tell.

A heroic campaign resembles the reality of action movies—heroes can attempt the near-impossible and have a slight chance to succeed, and death isn't the automatic result of a combat scene. You can use all of the SF genres within the framework of a heroic campaign.

Superheroic

A superheroic campaign follows the adventures of heroes who are far above the norm. This is comic-book reality, replete with high-powered mutants and psionicists, heroes with advanced gadgets and superpowers, and higher-than-average Ability

Keeping the Game Balanced

Regardless of the tone you adopt for your campaign, bear in mind the need for game balance—making sure that it's neither too easy or too difficult for heroes to succeed against their enemies.

The simplest way to keep a balance between the power of your heroes and the power of their opposition is to give the opposition the same advantages or disadvantages (in general, but not in every detail).

For instance, the major villains in a superheroic campaign should also have some form of super-abilities, or the heroes and their players won't be sufficiently challenged to make the story an enjoyable experience. At the other end of the spectrum, heroes in a realistic campaign are already going to have a tough time of it; if you don't require their opposition to cope with the same sorts of hardships the heroes have, it's going to be extremely difficult for them to overcome those adversaries—and no one enjoys a story in which the central characters ultimately fail.

Scores. Players receive 72 points to distribute among their heroes' Ability Scores in this type of campaign. In addition, they can use most of the optional rules—including the FX system presented in Chapter 16.

Creating a Unique Tone

You can easily modify the rules to create your own unique campaign. For example, you could set hero Ability Score points at 55, or increase the basic point cost for skills.

Remember, however, that the information in the *Player's Handbook* reflects a heroic baseline. If you decide to modify your campaign tone, keep this in mind. Increasing skill costs in a realistic campaign penalizes heroes (and their players) severely. Likewise, decreasing skill costs in a superheroic campaign may make things a bit too easy for your heroes, since they already receive additional Ability Score points.

eties where high technology is present, but not widely available. Even today, regions of our real world are inhabited by people subsisting on Stone Age technology. In a futuristic, starfaring campaign, unspoiled or undiscovered planets might exist whose technological advancements lag far behind the Progress Levels of the capital worlds.

While it might seem that PL 6 or 7 technology is a prerequisite for a starfaring campaign, this isn't the case. Imagine an Earth the same as our modern world with one exception: At some point, a wrecked alien spacecraft was dismantled and the secrets of its FTL drive were revealed. Space travel would still be risky and expensive—since life support, ship structure, sensors and communications, and other spacefaring technologies are barely sufficient to sustain a human in orbit—but it's possible to envision a PL 5 society engaged in the survey and exploration of nearby star systems.

PROGRESS LEVEL

Chapter 9: Goods & Services in the *Player's Handbook* defines Progress Levels, which is how the ALTERNITY game measures a society's or region's technological development. Most modern-day campaigns are set at PL 4, 5, or 6, while a science fiction campaign of tomorrow would be set at PL 6 or higher.

However, science fiction doesn't always imply superior technology. Alternate history or future Earth campaigns might deposit the heroes in a world of postholocaust savagery. Similarly, many people live in soci-

Travel in Starfaring Campaigns

How do starfaring cultures travel from world to world? The answer to this question has a profound effect on your campaign. Science fiction is a genre of diverse specialization; there's a world of difference between an exploration story in which the heroes have access to faster-than-light travel, and one in which they don't. Even within these two broad categories, you can divide the exploration story further by the type of locomotion that transports the heroes from place to place.

While many science fiction campaigns never leave the planet Earth or the bounds of its solar system, a greater portion assume that heroes can travel from star to star. If you intend to run a campaign where interstellar travel is possible for the heroes, you must decide whether they are limited to vessels that are slower than light, or whether they can use faster-than-light (FTL) travel.

Slower-Than-Light Travel

While many science fiction writers casually assume the existence of FTL travel, the scientific reality of the situation isn't so convenient. It's physically impossible for an object to attain a velocity greater than the speed of light. At best, scientists can conceive of spaceships traveling at 99.99% of the speed of light . . . but even at this speed, travel between distant stars is hideously slow.

Earth's nearest stellar neighbors are a little more than 4 light-years away, which means that something moving from here at the speed of light would take more than four years to arrive at the nearest star. True interstellar exploration might involve distances of 20, 30, 100, or even 1,000 light-years. Such voyages, undertaken at sublight speeds, seem incredibly impractical.

The amount of energy needed to propel a ship across such distances also presents a real problem. Right now, scientists can envision accelerating ships up to 1% of the speed of light. Traveling to the Sun's closest stellar neighbor at that speed would take more than four centuries. In order to make the trip in something close to the time it takes light to travel, you'd need an engine or power source of unprecedented efficiency. A chemical rocket doesn't possess sufficient power, and its fuel tanks are prohibitively large; the slower-than-light ship must use another propulsion method.

If you're interested in running a campaign that utilizes slower-than-light travel, you must consider a suitable engine. A few propulsion ideas appear below. You can use one or all of them in your campaign, or you can create an entirely new propulsion system.

► **Nuclear-powered ion engine:** This power system is not powerful enough to escape a planet's gravity well, but it could be ignited in orbit



Frontier settlement

and thereafter stretch its fuel for a very long period of acceleration.

► **Fusion drive:** Fueled by hydrogen atoms scooped from interstellar gas clouds, this ship could accelerate continuously as it draws fuel from interstellar space.

► **Accelerating through an external force:** This method would diminish or negate the requirement for fuel. A gigantic magnetic array could accelerate a ship as a bullet is shot from a gun, or a stationary laser could push a ship equipped with solar sails.

► **Completely imaginary technology:** Playing on the "fiction" in science fiction, you could postulate a hypothetical propulsion system that wouldn't require huge amounts of fuel—such as an antimatter engine.

Even if relativistic velocities of 70%, 80%, or 90% of light speed are attained, a trip from one star to another would take years. However, scientists and writers spend much of their time imagining solutions to this problem. Your science fiction campaign isn't stillborn if you decide that FTL travel is impossible. Several devices can explain how the crew of a slower-than-light interstellar ship endures such a long trip.

The first of these plot considerations uses the principle of relativity, as expressed in Einstein's special theory of relativity. One implication of that theory is time dilation, a term that describes what happens when time moves more slowly in the frame of reference of someone aboard a fast-moving object. Thus, passengers on a ship traveling at a high fraction of light speed would experience the passage of time more slowly than their planet-bound counterparts. The concept of time dilation allows your

heroes to travel great interstellar distances within their lifetimes—relatively speaking, of course.

For example, an astronaut could embark on an interstellar voyage at near light speed, making a round trip that takes him 10 years to complete. However, on his return, he would discover that nearly 50 years have passed for those people he left behind on Earth.

A bit of technology you might use to permit interstellar travel in a slower-than-light campaign is cryonics. Cryonic technology places starfarers in hibernation—their bodily functions slowed to a whisper above death—until someone or something wakes them at their destination. Some crewmembers might rotate on a watch schedule, remaining awake for a year or two at a time before returning to cold sleep for the duration of the voyage.

Finally, you can employ a traditional science fiction concept: the generation ship, a vessel so large that it's basically a traveling world. Almost all of the crew members aboard a generation ship live their entire lives without seeing their destination. By the time the ship reaches the end of its journey, several generations have lived and died. It's possible that such a ship could travel thousands of years in order to complete its voyage.

Regardless of how you explain it, slower-than-light travel isn't conducive to a star-hopping campaign. Consider sublight travel for a campaign in which you want the heroes to stay in one star system for long periods of time—a colonization scenario, for example. Optionally, the heroes might crew a fast-moving starship that doesn't return to a planet for hundreds of years of local time—while only a few months pass for the heroes. This way, the heroes could make planetfall at new systems several times during their lifetimes, while the rest of the galaxy ages by a millennium.

Faster-Than-Light Travel

If the prospects for interstellar travel under the confines of Einstein's theory depress you, then you can simply imagine that your universe does enjoy FTL travel. Heroes can hop into a ship and make the journey of a lifetime in a matter of weeks or even days. If you want FTL travel in your

game, you have several choices for defining how it works. Here are a few:

- Ships accelerate past the speed of light but remain in the physical universe.

- Ships jump, teleport, fold space, or enter another dimension to effectively exceed the speed of light.

- Ships don't carry FTL drives; they use some manufactured or natural condition (a stargate, wormhole, or black hole) to throw them across the stars.

- Planetary bases or facilities utilize teleportation for travel. There are no FTL starships—instead, objects and people are sent to other stars by transportation platforms, time arches, or similar devices.

There are several ways that you can structure the mechanism of FTL travel within each of the above-stated scenarios. For instance, ships in your campaign could achieve light speed while remaining in the physical universe if they were rendered completely inertialess. Even a simple fusion drive can reach interstellar speeds if it's pushing a mass of absolutely zero.

Or, your campaign could include a drive that encapsulates ships in a warping field, an event that allows them to exceed the speed of light. The net result is that the ship roars through real space, physically traversing the distance of its journey but breaking Einstein's laws in the process.

While the pseudoscience varies from story to story, every FTL method has three characteristics: expense, speed, and convenience.

Expense refers to the ease with which society can build faster-than-light ships or facilities; it determines the overall abundance of FTL travel. For example, only rich nations and corporations could afford to maintain an FTL drive that requires rare elements—the average individual simply can't afford to own or maybe even travel on an FTL ship.

Expense doesn't always involve materials. It can also represent the requirements for specially trained personnel. For example, a ship may require the services of a world-class Mindwalker to trigger its drive or navigate it through interstellar space.

Speed is an important characteristic of an FTL drive. Even at incredi-

bly high velocities, travel will take some time, and many voyages remain impractical if not impossible. For instance, assuming that a ship is capable of accelerating to 100 times the speed of light, a trip to the center of our Milky Way galaxy—30,000 light-years away—would still take 300 years. To make matters worse, the closest galaxy to the Milky Way is about five times farther away than the galactic center. Thus, an FTL drive needs to smash the light-speed barrier beyond recognition in order to have any usefulness for intergalactic travel.

Convenience represents the ease with which members of a starfaring species can utilize FTL technology. Even if cheap, fast FTL travel is available in your campaign setting, travelers may not necessarily use it regularly: The technology involved may have a high failure rate; the stresses and rigors of FTL travel may kill, drive people insane, or create long-lasting health problems; or the passage of the ship may somehow damage or wear out the space around the vessel, thus limiting the number of FTL vessels that can arrive at or depart from a particular system or planet in a given span of time.

Travel and Progress Level

If you don't have any specific notions of how interstellar travel originated in your campaign or what its capabilities are, use the following baseline categories to help identify the technological level of a particular culture or society.

The Information Age (PL 5): Based as it is on chemical rockets, interplanetary travel during this age is expensive, slow, and inconvenient. Only the largest private concerns or wealthy nations can afford to send people into space. Interstellar travel aboard generation ships may be remotely possible with a Herculean, worldwide effort.

The Fusion Age (PL 6): Interplanetary travel is affordable, moderately fast, and generally convenient. Many private businesses and organizations can afford interplanetary transport and facilities, and all but the smallest nations have offworld concerns. Slower-than-light interstellar travel, by means of generation ships or ships that travel at a significant fraction of light speed, is possible for

large and wealthy organizations that can afford to wait years or decades for results.

The Gravity Age (PL 7): Insystem travel is commonplace, fast, and convenient; a person can cross from one side of a star system to the other in hours or days. Many individuals can afford interplanetary vessels. Faster-than-light interstellar travel is expensive, but generally accessible and comfortable. FTL ships are owned and operated primarily by national and planetary governments, large corporations, and a few wealthy individuals.

The Energy Age (PL 8): Interstellar travel continues to improve, becoming easily affordable for anyone with a reasonable income or credit rating. Some vessels can travel hundreds of light-years in a matter of weeks.

Communication

In a modern campaign, your heroes can pull out a cellular phone or shortwave radio and talk to anybody in the world. With faxes, modems, and even videophones, there's no limit to a character's ability to call for help, check facts, or keep in touch with his superiors. However, the issue of communications becomes crucial in any star-spanning campaign.

The basic problem is the same one that was addressed in the discussion of faster-than-light travel: A radio wave travels at the speed of light, and sometimes that's just not fast enough. Of course, this speed is fine for connections between two locations on the surface of a planet, or a surface location and a station in orbit; virtually instantaneous communication is possible in such cases.

Across interplanetary distances, the light-speed restriction is a nuisance, but a tolerable one. Earth is about 8 light-minutes from the Sun, meaning that a starship near the Sun could talk to an Earth-based station with an 8-minute time lag. However, ships or stations in the outer reaches of a system—say, the vicinity of Neptune or Pluto—experience a time lag of hours from the time they send a message to the time it reaches its destination.

In extreme cases involving interstellar distances, a communication signal traveling at the speed of light could take decades, or even centuries, to reach its destination.

The good news is that in a campaign featuring faster-than-light travel, you can decide that technology exists that also allows communication signals to exceed the speed of light. People who need to contact one another can send messages, instead of using couriers aboard ships to convey information.

If comm signals can only move as fast as the typical FTL ship, then starships moving from one system to the next will most likely be used to carry communications between worlds. Long-distance communication in the campaign will resemble the way it worked on Earth in the early 1800s: Ships cross the oceans of space in a given span of time, and all message traffic moves at the same pace.

You could design a campaign that features FTL communication but slower-than-light travel. In such a setting, it's fairly easy to stay in touch, but electronic information is the only thing that can pass between star systems in anything resembling a timely fashion. It could take years for a rescue mission to reach an endangered colony, despite the fact that the rest of the galaxy knows of the trouble minutes after it appears.

If contact between star systems isn't important for the purposes of your campaign setting, you can simply stick with a realistic model in which travel is slower than light and communication is limited to light speed. This represents the universe as we know it today: Planetary populations will be effectively isolated, carrying out their business without hearing from their neighbors elsewhere in the galaxy.

FREQUENCY OF LIFE

The next step in developing your own campaign setting is populating it. Naturally, the frequency of life isn't a consideration for present-day technothriller or near-future Earth SF settings, but the general population of the universe is a major issue in a starfaring game.

Life-bearing planets may occur often in your campaign, or they may be extremely scarce. You get to decide. How many alien species and habitable worlds do you want? If you want a lot of them, use a fairly generous set of assumptions about plan-

etary formation, habitability zones, and world chemistry. If, on the other hand, you want extraterrestrial life to be nonexistent (or at least undiscovered) and you decide that humanity can only survive on planets that can be terraformed, use more stringent parameters in your campaign.

We're Alone

In this type of campaign setting, extraterrestrial life is virtually nonexistent. The sheer improbability of finding other planets that contain the necessary elements for the natural development of life makes humanity's colonization attempts the focus of such settings.

Lifeless worlds, even though they don't serve as sources of alien antagonists, can still be interesting adventure sites, bases, or outposts. A lifeless world may have mineral or energy resources waiting to be exploited.

If Earthlike worlds are rare among the stars, any planet with a reasonable temperature and some kind of atmosphere can be a candidate for terraforming. Using tailored microorganisms, robotic factories, or asteroid strikes, colonists might be able to alter a planet's atmosphere in a matter of decades.

We're Not Alone

This type of campaign assumes that extraterrestrial life is abundant. Heroes regularly interact with members of other species, both as fellow adventurers and as supporting cast members. An alien-heavy campaign provides players and Gamemasters with a variety of roleplaying possibilities. Diplomatic missions, journeys of exploration, interstellar trade, and galactic war become possible with the introduction of other species to your universe.

Before you create a horde of extraterrestrial life, think about what role these aliens will play in your setting. Do you want players to be able to create alien heroes, allowing them to explore your campaign setting from a nonhuman point of view? Do you want to involve the heroes in stories that demand the presence of aliens as part of the setting? Or do you just want to have a sense of the exotic and unusual surrounding the heroes as they pursue their careers?

Many fine science fiction stories don't involve aliens as central characters; humans are certainly diverse

and interesting enough to sustain most SF settings all by themselves. But even if you restrict aliens to a secondary role, that role can be vitally important. For instance, if you're running a near-future or horror campaign, you can use aliens—or the hint of aliens—to add mystery and excitement to the campaign.

Campaign Evolution

A campaign is a dynamic entity that continually grows and changes. During the game, your players will make choices that alter the face of the campaign. It's up to you to respond to those choices in a way that is both believable and consistent with the universe you've created.

A vibrant campaign evolves during the course of play. What happens, for example, when the heroes succeed in putting down the rebellion? Do they take a role in the new government? Do they move into the private sector and start an interstellar trading company? Do they wander off to explore the next star system? How you answer questions such as these will help to determine what direction your campaign takes as it evolves.

What's the Adventure?

The final basic issue to be tackled in the process of campaign design is determining what sorts of adventures you want your setting to accommodate. What quests will your heroes undertake? Are they exploring uncharted planets, fighting a ruthless alien enemy, undertaking missions of espionage and sabotage against rival corporations, or taming an unsettled world? Think about what kinds of adventures you like to run, what kinds of adventures your players like to play, and then consider what sort of universe or setting allows you to create these adventures.

An exotic setting by itself isn't automatically a source of good adventures—the setting needs to feature a storyline or a threat that serves as a way to motivate the heroes. See *Chapter 15: Adventure Design* for details on how to accomplish this goal.



CHAPTER 14

CAMPAIGN ARCHITECTURE

Stars, planets, and civilizations provide a detailed and exotic backdrop for the events of your game. Whether their heroes fight for survival on a postapocalyptic Earth or travel between the stars in search of adventure, your players will expect a well-detailed, cohesive universe with which they can interact. This chapter offers concrete information on building your own space sectors, star systems, and worlds.

BEGINNING DESIGN

It could take thousands of words to describe a single city in detail, let alone an entire star system—but don't despair. Fleshing out a good setting for your campaign isn't necessarily a full-time job. For starters, you can get by with a strategic map, a local map, and five to ten detailed locations in each area. Develop other areas as the campaign progresses.

Strategic Map

A strategic map is a comprehensive guide to the areas in your campaign world. It contains information on space sectors, planetary systems, individual planets, and just about any other significant location.

When creating a strategic map, think first about the places you want the heroes to explore. Do you anticipate your campaign shifting its focus or scope over time? Place some blank areas or frontier systems on the strategic map. This allows you to expand the campaign later.

The second issue to consider is the politics of the area. Where are the villains of the campaign, and why do they exist? What high-level forces might eventually impact the heroes in their own local campaign area? For example, if the heroes' home area is part of a system that's rebelling against galactic tyranny, many of their adventures could involve dealing with attacks by enemy forces, hunting down enemy spies and infiltrators, or searching for a weapon or a form of technology that

could make it easier for the rebellion to succeed.

Sites of Interest

To start the process of detailing your strategic map, it's a good idea to identify anywhere from five to ten interesting sites (nations, systems, or empires) and create thumbnail sketches of each. You don't need to describe each of these sites' leaders as a supporting character, but it might be useful to create a supporting character who represents each large nation or power and is responsible for dealing with heroes in an official capacity—perhaps a mid-level functionary such as a scout, agent, or administrator.

Local Map

A local map shows a relatively small area (compared to what a strategic map depicts) in which you expect the heroes to remain for at least the first few adventures of a campaign. It could take several forms: a street-by-street map of a city, station, or outpost; a county-sized map marking towns, natural landmarks, creature lairs, and ruins; a map of a nation or an entire planet, noting the area's most prominent cities and physical features; or a map of a star system showing where the planets are.

Usually, the heroes can reach any spot in the local campaign area with a minimum of preparation. Some of the heroes may know the area well and have a good idea of the political and geographical landscape.

The size of the local area can vary according to the circumstances of your setting. If your players' heroes

have apartments on Earthport, like to do their drinking at Harry's Cafe on the planet Mars, and then spend their time chasing pirates and smugglers among the moons of Jupiter, that's fine—as long as the technology in your campaign supports such a large territory. For example, the local area of a campaign that uses conventional chemical propulsion is probably quite smaller than the local area of a campaign that utilizes FTL travel. Not every part of the area needs to be equivalent in size or scale—a local area might consist of a few hundred square miles of planetary surface, plus the interior of a high-orbit spaceport thousands of miles away.

Sites of Interest

Once you decide what your local area consists of, you should create five to ten sites of interest and place them within that area. A site of interest can be something as basic as the lair of a dangerous creature, or something as complex as an alien city, a crimelord's headquarters, or a bustling spaceport. At a minimum, provide at least one place the heroes can use as their base of operations, a couple of areas where they can go to gather information or socialize, and a few locations that might offer challenges to them.

Each site of interest you create for the local area should contain a supporting character or two. This is a good way to begin stocking your campaign setting with interesting personalities.

14 STAR SECTORS

The most ambitious task you face when creating a starfaring campaign is the design of a piece of the galaxy to call your own. A galaxy is a titanic place, containing *billions* of stars. If humanity ever develops FTL travel, it would take centuries or millennia to survey just the spiral arm of the Milky Way in which Earth is located, let alone the entire galaxy.

Naturally, not every campaign needs a star map. If your campaign is built around modern-day espionage, an alternate history or a future Earth that doesn't involve space travel, or even a near-future space opera, making a star map for it is unnecessary. However, a good map of a well-designed sector is an indispensable tool for creating a starfaring campaign.

The following section contains rules for designing your own stellar areas—beginning with sectors and gradually narrowing the focus to individual planets and civilizations.

Scale

Do you want humanity's place in the universe to consist of a few dozen stars within 10 or 20 light-years of Earth? Do you want a true galactic empire spanning thousands of light-years? Or is something in between those extremes more appropriate?

TABLE G57: STARFARING CAMPAIGN SCALE describes the basic choices available to you. The labels in the "Size" column are simple descriptive terms with no specific meaning in the context of the game rules; what's most important are the numbers in the other three columns.

For instance, a sector the size of a cluster measures around 100 light-years from edge to edge and contains roughly 5,000 stars. To depict this sector on a normal-sized piece of hex-grid paper, a map scale of 5 light-years per hex is recommended. Of course, that piece of paper won't contain specific locations for each of those 5,000 stars. Even a thoroughly developed sector probably has only 40 or 50 star systems described in detail, so what you're really doing when you set a scale is determining the number of unknown, unexplored, or insignificant star systems between the sites of interest in your game.

TABLE G57: STARFARING CAMPAIGN SCALE

Size	Diameter	Stars	Map Scale
Province	10 LY	50	1 LY/hex
Cluster	100 LY	5,000	5 LY/hex
Region	1,000 LY	500,000	50 LY/hex
Arm	10,000 LY	50,000,000	500 LY/hex
Galaxy	100,000 LY	5,000,000,000	5,000 LY/hex

Developing a Sector

The easiest way to create a sector is to come up with five or ten star systems that you want to showcase, then mark each as a dot on the map in the relative location you think is best. Although stars may have dozens of planets and hundreds of outposts in their vicinity, you don't need to worry about detailing them at the sector level. Star systems are described in detail in the next step of this process.

A piece of paper printed with a hexagonal grid is all you need to depict the key locations in the sector you're designing. (You can use a piece of graph paper with a square grid if you prefer that style of map.) Remember, it's not your job to identify every star in your campaign territory; even a province-sized sector (see Table G57) can contain dozens of stars that have no importance in the story you want to tell, and as such they don't need to be placed on your map. If your map encompasses an entire arm of the galaxy, you'll have to assume that there are *thousands* of unmarked stars in each and every square on your map.

Stars shouldn't occur at equally spaced distances across your map; that would be boring and unrealistic. Clump a few stars together in one or more areas of the map, and leave large tracts between those clumps where few stars exist. These empty stretches are sometimes called *rifts*. Rifts may represent areas of the cosmos in which all significant astronomical bodies were incinerated by ancient supernovas; they can be areas of mystery for heroes to explore, or perhaps they can serve as borders between different stellar empires in the sector.

While stars are the most obvious sites of interest in a sector, space also includes vast clouds of dust and

gas, called *nebulas*. A typical nebula stretches for dozens of light-years and contains only a few more particles per cubic meter than the hard vacuum of interplanetary space.

Nebulas come in two varieties: dark and bright. A dark nebula is made up of cold, drifting gas and dust. Bright nebulas possess brilliant stars that burn inside the cloud and give off illumination. Both dark and bright nebulas are important because of their roles as stellar nurseries, the birthplaces of new stars.

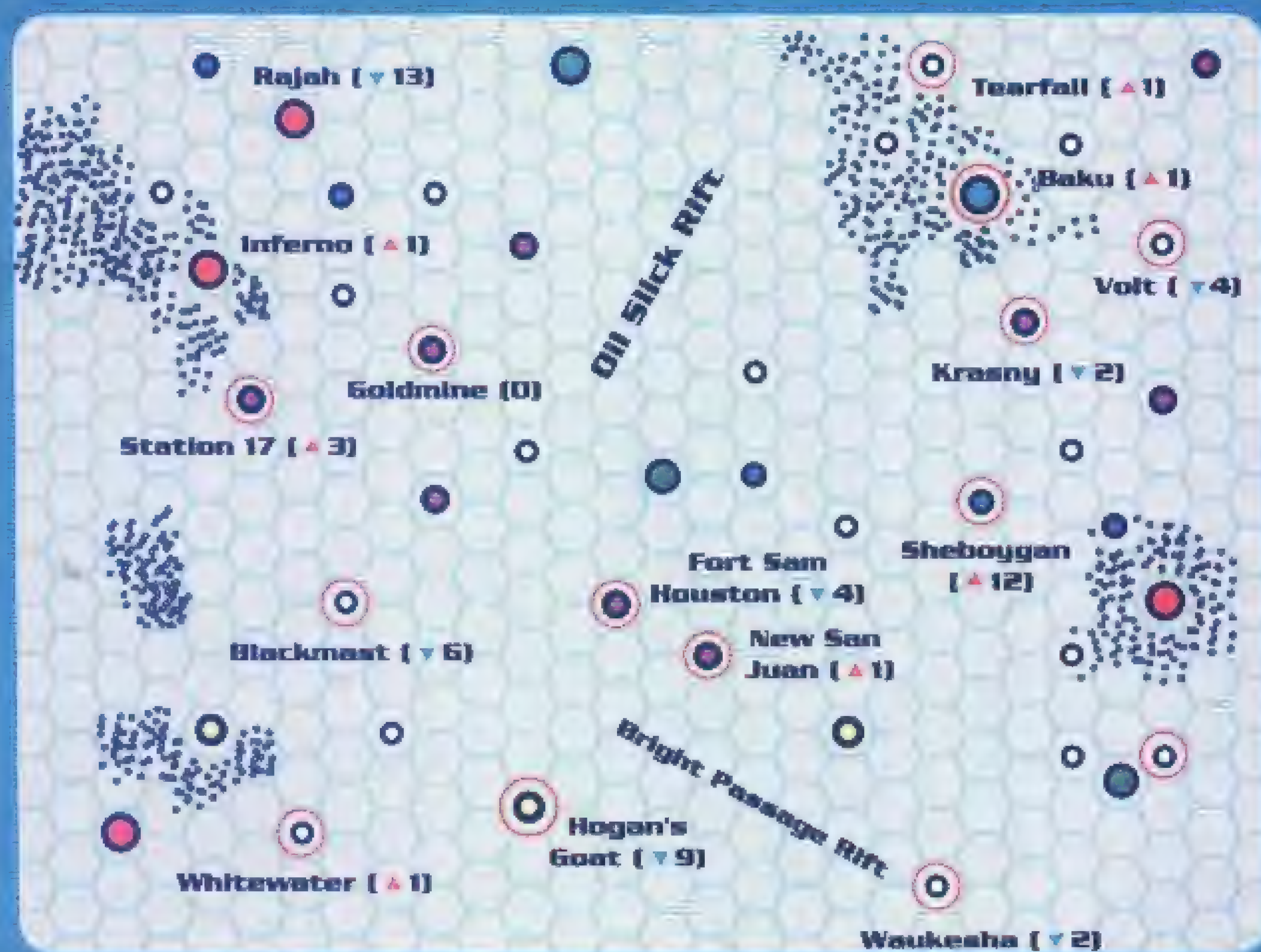
In addition to the physical phenomena of a sector, you also need to describe the inhabitants of that area. Which of the dozens or hundreds of stars marked on your map are homes to life-bearing worlds? How are these systems organized? Do they have interstellar governments or empires, or are they a disjointed collection of independent planets?

In campaigns in which FTL travel is impossible, expensive, or unreliable, interstellar governments are unlikely at best; each star system would exist as an isolated state. Faster-than-light travel and communication make it possible for star systems separated by the gulf of interstellar space to be controlled by a central government.

Mapping in Three Dimensions

Unlike a map of a planetary surface, a sector map must represent three-dimensional space. Rendering such an area on a two-dimensional sheet of paper presents a few challenges. However, there are a few tricks for showing which stars are "above" or "below" the level surface of your mapsheet.

First, assume that a horizontal plane bisects your sector—this is the two-dimensional area defined by the mapsheet. One or more of the stars you place on the map should be located on this plane, so that it serves



Key

- Class O
- Class B
- Class A
- Class F/G
- Class K
- Class M
- Red Giant
- Colonized System
- Nebula
- ▲ Distance above or below galactic ecliptic

1 hex = 5
light-years

as a base reference point. If one of the star systems in your sector is more important than the others, or if one system happens to be centrally located within the sector, it would make sense to locate the horizontal plane so that it runs directly through that star. Next to any star that this plane does not pass through, you'll jot down information that shows its location in the third dimension—its distance above or below the plane.

The sample sector map on this page (representing a portion of a cluster-sized sector) demonstrates an effective way to map three-dimensional spaces. On this map, most stars have designations such as "▲1" and "▽2." The "▲" signifies a stellar body that's located above the horizontal plane that runs through the star that happens to fall at the center of the map. The "▽" signifies a stellar body that's located below the horizontal plane. The number next to the symbol denotes the actual distance, in hexes, that a stellar body hangs (above or below) the horizontal plane. Thus, Rajah ("▽4") is 4 hexes (or 20 light-years, according to the map's scale) below the horizontal plane. (The only star without an up

or down reference is Goldmine, located on the plane of this map.)

To get a rough (sometimes very rough) estimate of the distance between two stellar bodies, simply add the horizontal distance to the overall vertical distance and take two-thirds of that total. For instance, the horizontal distance between Hogan's Goat ("▽9") and Sheboygan ("▲12") is 11 hexes. The overall vertical distance is 9+12, or 21. So, the distance between the two stars is two-thirds of 11+21=32—approximately 22 hexes, or about 110 light-years.

If both stellar bodies lie on the same side of the horizontal plane—for example, Blackmast ("▽6") and Fort Sam Houston ("▽4")—calculate the overall vertical distance by subtracting the smaller number from the larger. Thus, the vertical distance between Blackmast and Fort Sam Houston is 2 (6-4=2) rather than 10.

This system merely approximates three-dimensional distances. For a truly accurate calculation, use the Pythagorean theorem ($a^2 + b^2 = c^2$) for each axis. Additionally, you can use computer software to plot your sector in detail, or construct a model of a sector and suspend the stars by wire.

STAR SYSTEMS

Each of the countless points of light in the sky is a star system, and each system is an island of matter, energy, and possibly life in the great dark void of interstellar space. If you run an interstellar campaign, you may need to describe a dozen or more star systems; if you run an interplanetary campaign, you'll need to sketch out just one.

The size and age of a star dictate how likely it is to have planets, the habitability of those planets, and the resources or phenomena associated with that system.

Number of Stars

A great number of star systems are actually binary systems—two stars, each orbiting around the other. Binary systems and even more complex multiple-star systems comprise more than half of the star systems in the universe.

Binaries, trinarys, and other exotic arrangements are certainly interesting, but in reality these systems pose significant barriers to human colonization. Planets formed in a bi-

nary or multiple-star system often possess climates and temperatures antithetical to human life.

In general, aliens with extremely unusual biochemistries—those capable of surviving in conditions of extreme heat or unendurable cold—stand the greatest chance of being able to colonize such worlds. Humans living in these systems must remain in shielded stations or other artificial environments, such as hollowed-out asteroids or domed cities. Of course, this is science fiction, so you can throw a scattering of human-tolerable worlds among your multiple-star systems if it suits you.

To determine the number of stars in a particular system, roll d20 and refer to TABLE G58: STARS IN A SYSTEM. You can always reroll (or choose the number of stars yourself) if the result clashes with your concept of the star system.

**TABLE G58:
STARS IN A SYSTEM**

d20	No. of Stars
1-10	1
11-16	2
17-18	3
19	4
20	5 or more

Spectral Class

The most important characteristic of a star is its mass. A star's mass determines the temperature at which it burns, the likelihood of planets in its system, the habitability of those planets, and the lifespan of the entire system. Very large stars burn much hotter than Earth's medium-sized Sol and exhaust their nuclear fuel much faster. Small stars burn cooler and conserve their fuel.

The temperature at which a star burns determines its color, or spectral class. Most stars belong to one of the classifications along the *main sequence*: O, B, A, F, G, K, M. Class O stars are the hottest and brightest, while Class M stars are the coolest and dimmest. However, certain events in the life of a star may cause it to deviate from the main sequence. For example, a star that exhausts its

primary fuel (hydrogen) may start burning helium. This causes it to swell drastically in volume and burn brighter than its temperature would normally indicate. Scientists call these stars red giants.

Planets that are habitable, as humans define the term, rarely exist except in Class F, G, and K systems. The hotter stars (O, B, and A) are too large, hot, and active to support Earthlike worlds unless such a world is extremely distant from its parent star. In addition, O, B, and A stars burn for only ten or twenty million years—and it took hundreds of times longer than that for multicellular life to develop on Earth. Of course, explorers and colonists may be able to settle on such worlds when they do exist, unconcerned with the failure of native life to develop or the star's late millions of years in the future.

On the other end of the scale, Class M stars (red dwarfs) put out only a fraction of the solar energy necessary to support life at an orbit anywhere near Earth's, so an Earthlike world would have to orbit much closer to the star. Also, many red dwarfs are so-called "flare stars," subject to violent instabilities that could make close-orbiting planets dangerous places to visit.

The stellar components of a binary or multiple-star system don't always match in spectral class. For example, the Centauri star system, Sol's nearest neighbor, consists of three stars: Alpha Centauri A, Alpha Centauri B, and Proxima Centauri. The first two bodies are class G stars fairly comparable to Sol. Proxima, however, is a red dwarf that orbits its companion stars at an immense distance. When the stars in a multiple system are of different sizes, the largest one is dominant and is referred to as the primary (see TABLE G60: MULTIPLE-STAR SYSTEMS).

Non-Main Sequence

Some of the most unusual stars are *non-main sequence* bodies. In other words, they don't fit the typical models of mass and temperature.

Black holes (also known as *collapsars*) are the remnants of very large stars that have exhausted their hydrogen fuel and exploded in a supernova. This explosion makes it unlikely that any significant planetary system survives around the star. In addition, black holes have such incredibly strong gravity that they

distort time and space, further reducing the chances of any surviving planetary matter. Because a black hole drags nearby matter toward and into its maw, such objects are often surrounded by swirling clouds of cosmic debris known as accretion disks.

Bodies as massive as good-sized asteroids or planetesimals may be slowly spiraling to their doom in a black hole's orbit, but heroes still might visit the vicinity for some reason or another. A long stay, however, is very unhealthy, since black holes give off vast amounts of deadly radiation. It has been theorized that a vessel with sufficient shielding could pass through a black hole and end up in an entirely different part of the universe, or another universe.

Neutron stars form when large stars exhaust their fuel, but don't collapse completely. All the remaining matter compresses into a tiny body only a few kilometers across. The material's density crushes its atoms, resulting in an object composed entirely of neutrons. A neutron star may be surrounded by the blasted remnants of a planetary system. However, worlds of this sort would be cold, lifeless, virtually lightless, and bombarded by scathing amounts of hard radiation. *Pulsars* are rotating neutron stars that also cast out a massive volume of radiation.

White dwarfs are stars that don't have sufficient mass to collapse into neutron stars. Such a body is small, dense, and ringed by the wreckage of its planetary system. A white dwarf system would be cold and dark, since the star doesn't put out much light or other energy.

Black dwarfs are small stars that simply burn out after exhausting their fuel. When this exhaustion occurs (a rare event, since any small star will burn dozens or hundreds of times longer than our own Sun), all that's left is a cooling cinder. A cold and dark planetary system may circle the remnants of the dead star.

Brown dwarfs are unlike the other non-main sequence bodies—they're stars that never quite formed, rather than stars that ignited and later burned out or exploded. In order for a ball of gas to become a star, it must have a sufficiently great mass in order to generate the temperatures necessary to ignite and sustain the fusion reaction that makes a star blaze. If a body never ignites, it be-

TABLE 659: SINGLE-STAR SYSTEMS

d20	Class	Color	Planets	Orbit Track
1	O/B	Blue-white	d12-8	I
2	A	Blue	d12-6	I
3-6	F	Green	d12-3	II
7-10	G	Yellow	d12-2	II
11-14	K	Orange	d12-4	II
15-19	M	Red	d8-2	III
20	Non-main sequence star; roll again:			
d20	Star	Planets	Orbit Track	
1	Black hole	d12-9	V	
2-3	Neutron star	d12-7	V	
4-7	White dwarf	d12-8	V	
8-10	Black dwarf	d8-2	V	
11-18	Brown dwarf	d8-3	III	
19-20	Red supergiant	d8-1	IV	

TABLE 660: MULTIPLE-STAR SYSTEMS

d20	Primary (Secondary)	Planets	Orbit Track
1	O or B (white dwarf)	d12-9	I
2	B or A (M)	d12-9	I
3	F (G)	d12-8	IV
4-5	F (K or M)	d12-7	II
6-7	F (brown dwarf)	d12-7	II
8-11	G (G)	d12-7	IV
12-15	G (K or M)	d12-6	II
16-17	G (brown dwarf)	d12-7	II
18-19	K (K or M)	d12-8	III
20	K (brown dwarf)	d12-7	III

For systems with more than two stars, generate a binary pair and a single star (3 stars), two binary pairs (4 stars), two binaries and a single (5 stars), or three binary pairs (6 stars).

Planets is the number of planets in the system. If a die roll produces the highest possible number, roll again and add the second result to the first (only reroll once, even if the second roll also yields the highest possible number). On the first roll, any result of 0 or less (a roll of 6 on d12-7, for example) indicates the absence of planets.

Orbit Track lists which of the columns to reference on TABLE 661: ORBIT TRACKS (page 195) to establish how far away planets are from their parent star.

Developing a Star System

The two tables on this page provide the most basic details about a star system: the type of star(s) in the system, the number of planets in the system, and a general statement concerning how far away those planets orbit from their parent star. If planets exist in a system, you'll want to record their locations relative to each other and their parent star.

At the end of this book you'll find a System Record Form, designed to summarize the critical information about a star system at a glance. Record the name and spectral class of the system's parent star at the top of the form. The form includes a series of rings; each of these indicates an orbit that a planet might occupy around the star.

In addition to affecting the number of planets present, the spectral class of the star also influences where planets are likely to form. TABLE 661: ORBIT TRACKS reflects this fact. All the possible orbit tracks where a planet could be located are depicted on the System Record Form, along with enough blank lines to record information about each planet as its location is determined.

When creating a new star system, it's easiest to begin with the innermost planets and work outward. Each of the marked orbit rings on the System Record Form may or may not have a planet (or some other body) at that distance from the star. As you work outward, there's a 50% chance that each particular orbit ring contains one of the planets in your system. Keep working outward until you assign each planet an orbit, until you run out of orbit tracks, or until the comet belt comes up as a planet type. Ignore any leftover planets.

◆ **Example:** Dave is creating a single-star system centered on a class G star. Table G59 tells him that the star has d12-2 planets. He rolls d12 and gets the highest possible result—12. This means that there are at least 10 planets (12 - 2), and he rolls d12 again. His roll of 3 gives him 1 more planet (3-2=1), for a total of as many as 11 planets in this system.

Referring to Table G59 again, he sees that this star will have a Type II orbit arrangement. He proceeds to TABLE 661: ORBIT TRACKS and first checks to see if a planet exists on Ring 1, which is 0.3 AU from the star.

comes a smoldering brown dwarf, giving off heat and possibly a little light. Brown dwarfs are hard to detect, since they're dim and small. A traveler would have to pass within a few million kilometers of one in order to notice it.

Red supergiants are spectacular, but short-lived, stars. When a star of average size such as Sol exhausts its store of hydrogen, it begins to burn the helium and other heavier elements manufactured during its eons

of hydrogen fusion. This causes the star to cool and swell to a tremendous girth. A red supergiant swallows any inner planets it may have possessed and renders the rest of the system uninhabitably hot, then lasts thereafter for only a few million years before exhausting its fuel and becoming a supernova, with a resulting cataclysmic explosion that annihilates anything within a radius of several light-years.

After deciding that "heads" means "yes," he tosses a coin. It comes up heads, so one of Dave's 11 planets is located on Ring 1. On the first blank line under "Orbit," he writes the orbital distance (0.3).

He moves to Ring 2 (orbital distance 0.4). He flips the coin again, and this time it comes up tails—no planet. The coin indicates a planet for Ring 3, so Dave writes "0.7" on the second blank line under "Orbit." He has now placed two planets out of a maximum of 11.

As it turns out, Dave places only five planets before he generates a comet belt at Ring 10 (orbital distance 15.0). That represents the outer limit of the star system, so he disregards the fact that he had more planets he could have placed. Now he moves on to the next step in system generation, which is . . .

PLANETS

While stars inspire awe, they're only of passing interest to the typical group of explorers. Most heroes opt to explore the challenging and sometimes bizarre environments offered by planets. In a starfaring campaign, you may need to build up a portfolio of a dozen or more well-developed planets and thumbnail sketches of dozens of less interesting worlds. These planets form the background for your heroes' adventures.

In the system generation procedure being outlined here, a planet's distance from its parent star is the major factor in determining what type of body it is.

The size and temperature of the parent star governs the range of the star's *habitability zone*. This is the approximate distance at which a planet receives the solar energy necessary for life (in whatever form).

The habitability zone of a hot star is much farther away from the star than the habitability zone of a cool star. If the Earth's parent star were a blue giant instead of a relatively small yellow star, and its orbit was at the same distance, the enormous energy output of the star would turn the planet into an irradiated wasteland resembling Mercury or Venus. On the other hand, if Earth orbited a red dwarf at the same distance, the dearth of energy from the parent star would make the planet a frigid ball, much like Uranus or Pluto.

Using the Tables

The three tables on the facing page enable you to determine the basic characteristics of a single planetary system (consisting of a planet and its moons, if any). Refer first to the "Planet Type" column on TABLE G61: ORBIT TRACKS. Each entry in that column lists a die to roll. Make the roll, adjust the result by the number given, and consult the "Die Result" column on TABLE G62: PLANETS. The process is summarized in the notes accompanying the tables, and described in detail below.

◆ **Example:** In the system Dave is developing, the first planet is on Ring 1. According to the right-hand column of TABLE G61: ORBIT TRACKS, Dave should use d6-3 to determine the planet type. The die roll is 4, yielding a result of 1. Dave checks TABLE G62: PLANETS and sees that the first planet in his system is a hot super-Terran.

In addition, the table indicates that this planet has d6-3 moons. Dave rolls a 6 this time, yielding a result of 3 moons. After noting that this planet's moon modifier is -1, he goes to TABLE G63: MOONS. He rolls 2d6 three times, getting results of 8, 8, and 5. Subtracting 1 from each die roll produces final results of 7, 7, and 4. Two of the moons are ring systems, and the remaining moon is small. This moon is too diminutive to keep much in the way of an atmosphere, so Dave determines that it's simply an airless, hot, irradiated rock.

Types of Planets

Planets display a wide variety of orbital characteristics, elemental composition, appearance, and evolution. The information that follows details the bodies and phenomena that heroic spacefarers might encounter as they explore a star system. You can adapt the general principles behind these planetary types, or ignore them in favor of your own design.

Ring Systems

A ring system is the wreckage of a satellite that was destroyed by the tidal influence of a nearby larger body. The rings are primarily made up of very small particles of matter (gas and dust), possibly held in a coherent shape by the gravity of larger asteroidlike bodies interspersed throughout the gas and dust.

Complex Systems

You may notice that the System Record Form assumes that a system's parent star is at its center. This assumption works fine for a single-star system. However, many of the orbital relationships between stars and their planets in a multiple-star system are much more complex than this. The number of possible configurations in such a system, as well as the complicated scientific principles of orbital mechanics, put the task of developing a fully detailed multiple-star system far beyond the scope of these rules.

Feel free to create some detailed complex systems if you have the time, skill, and inclination. You'll need to modify the existing System Record Form, since it was designed only for single-star and simple multiple-star systems.

Sub-Terran Planets

Rocky or stony bodies significantly smaller than Earth, sub-Terran worlds may support life. In the Sol system, Mercury and Pluto qualify as sub-Terran bodies, as do most of the moons orbiting the various planets.

A hot sub-Terran planet is a small, dense world close to its parent star. Such bodies tend to be rich in heavy minerals—the solar wind carries off many lighter elements—but have little or no atmosphere. Many hot sub-Terran planets are tide-locked—the star's gravity has slowed the planet's rotation to a standstill, so that one side bakes in continual daylight while the other freezes in unending night.

Cold sub-Terran planets are often mineral-poor; they form on the outer fringes of a system, where heavy elements are scarce. Since these bodies are small and not very dense, their gravitational pull can only capture a thin atmosphere. Many of the larger moons of outer gas giants qualify as cold sub-Terran planets.

Super-Terran Planets

Super-Terran planets are metallic or rocky bodies significantly larger than Earth. They easily retain atmospheres due to their strong gravity.

TABLE G61: ORBIT TRACKS

Ring	I	II	III	IV	V	Planet Type
1	0.7	0.3	—	1.5	—	d6-3
2	1.0	0.4	—	2.0	—	d4-1
3	1.5	0.7	—	3.0	—	d4
4	2.0	1.0	—	5.0	—	d4+3
5	3.0	1.5	—	10.0	—	d4+4
6	5.0	2.0	0.1	15.0	—	d6+4
7	10.0	3.0	0.2	20.0	1.5	2d6+6
8	15.0	5.0	0.3	25.0	2.0	2d6+6
9	20.0	10.0	0.4	30.0	3.0	2d4+10
10	25.0	15.0	0.7	35.0	5.0	2d4+10
11	30.0	20.0	1.0	40.0	10.0	d8+10
12	35.0	25.0	1.5	45.0	15.0	d8+10
13	40.0	30.0	2.0	50.0	20.0	d6+12
14	45.0	35.0	3.0	55.0	30.0	d6+12
15	50.0	40.0	5.0	N/A	40.0	d8+12
16	55.0	45.0	10.0	N/A	50.0	d8+12

Ring: An orbital track on the System Record Form.

0.7, 1.0, 1.5, etc.: The distance of that ring from the primary star, in astronomical units (AU). For example, Ring 5 in a system with a Type III orbit track is located at 0.7 AU.

Planet Type: Roll the die indicated and refer to TABLE G62: PLANETS (below) to determine the planet's type.

TABLE G62: PLANETS

Die Result	Type	Moons	Moon Modifier
0 or less	Ring system	None	N/A
1	Super-Terran, hot	d6-3	-1
2-3	Sub-Terran, hot	d4-3	-5
4	Terran, hot	d6-4	-3
5	Terran, temperate	d6-2	-3
6	Sub-Terran, temperate	d6-3	-5
7	Super-Terran, temperate	d8-3	-1
8-9	Asteroid belt	None	N/A
10-11	Gas giant, large	2d12	0
12-14	Gas giant, small	d12	0
15	Super-Terran, cold	d6	-1
16	Terran, cold	d4	-3
17	Sub-Terran, cold	d3	-5
18+	Comet belt	None	N/A

Type defines the planetary body.

Moons indicates the number of moons the body possesses. A result less than 1 indicates an absence of moons around this planet. For each moon that exists, roll once on TABLE G63: MOONS (below).

Moon Modifier lists a modifier that applies to the 2d6 roll made on TABLE G63: MOONS.

TABLE G63: MOONS

2d6	Type	
2-3	Tiny	A moon has the same temperature as its parent planet. (Consider gas giants to be cold—but see the text at right for an exception.)
4-6	Small	
7	Ring system	
8-9	Sub-Terran	
10-11	Terran	
12	Super-Terran	

A hot super-Terran might possess an atmosphere composed of relatively heavy elements such as sulfur and oxygen. The planet is probably in a molten state due to its proximity to the parent star, which makes it an unlikely candidate to be a life-bearing world.

A cold super-Terran retains lighter gases such as hydrogen and methane. Such a world could conceivably support life—especially if its rotation was rapid enough to partially offset the planet's crushing gravity.

Terran Planets

These worlds are roughly Earthlike in size and composition. Naturally, bodies of this type are the most likely to develop life as we know it. In Earth's solar system, Terran worlds include Venus and Mars. Under the right conditions, either one of these planets could develop into life-bearing worlds.

A Terran world has enough gravity to retain a relatively dense atmosphere—although the vagaries of its composition and the planet's proximity to the sun dictate just how this atmosphere evolves as the planet ages.

Gas Giants

These are planets composed primarily of light gases—hydrogen, helium, methane, and ammonia—in various quantities and states. These bodies tend to form where large amounts of light gases accumulate early in the development of a solar system. Gas giants frequently gather a number of rocky or metallic moons and some rings—though most of the moons are nothing more than tiny, captured asteroids.

Gas giants tend to be cold, poisonous, violent, and practically bottomless. There's no solid surface to land on for thousands of kilometers, and at the depths at which a liquid ocean or solid core could exist, the atmosphere exerts indescribable pressure. Even if a protected human could survive the atmospheric pressure, the crushing gravity would kill.

While gas giants are completely inhospitable to human life, their moons may support life. A gas giant orbiting close to its parent star—from 1 to 5 AU, for example—may possess moons close enough to Earth in size and composition to foster life. These Terran or sub-Terran satellites are generally temperate.

Asteroid Belts

Icy, stony, or metallic rocks may circle a star. Unlike a ring system, an asteroid belt is made up entirely of boulder-, mountain-, and moon-sized bodies. The concentration of these objects is relatively dense compared to the emptiness of space, but the distance between adjacent asteroids is still considerable; even a large spaceship could easily navigate through most asteroid belts without coming close to a collision.

The largest asteroids are only a couple of hundred kilometers in diameter—far too small to retain atmospheres or to have any significant gravitational fields. These bodies are excellent sources of nickel, iron, carbonaceous compounds, water, and other minerals that are scarce in the outer reaches of a system.

Most individual asteroids weave complicated orbital paths within the confines of a belt; sometimes, the influence of a nearby planet may pull them away from their companions. For instance, some of Jupiter's outer moons are probably captured asteroids.

Some asteroids have highly elliptical orbits that may result in collisions with inner planets from time to time. The so-called "dinosaur killer" impact 65 million years ago on Earth may have been caused by an asteroid of this type.

Comet Belts

Present around almost every star, comets are composed of rock and water, or ammonia ice, and they're rarely more than a few dozen miles

in diameter. A comet's tail forms when material evaporates from the comet as it passes close to its parent star. Comets have distant and extremely elliptical orbits, sometimes taking thousands of years to travel one complete circuit back to the inner regions of a system.

Moons

Planetary satellites vary widely in size and composition. Tiny moons are 50 to 200 kilometers in diameter, usually asymmetrical and far too small to retain any kind of atmosphere. Small moons range up to 2,000 kilometers in diameter and may have trace atmospheres. Sub-Terran moons are large enough to be planets in their own right; in Earth's solar system, the four large moons of Jupiter (Ganymede, Io, Europa, and Callisto), Saturn's satellite Titan, and our own Luna fall into the sub-Terran category. Terran and super-Terran moons are correspondingly larger.

If a moon is large enough to possess an atmosphere, it may support life—if the moon's parent planet isn't too close to its star. A large moon with a heavy atmosphere (Titan, for example) may have an intolerably hot or cold climate.

In order for an Earthlike world to exist in orbit around a gas giant, the gas giant must orbit somewhere in the star's habitability zone. In addition, the Earthlike moon would probably need to orbit the gas giant at a substantial distance to minimize the planet's destructive tidal effects.

Orbital Characteristics

Not all star systems look alike. The first planet around one star might be a molten inferno only a few million kilometers from its sun, while the first planet around another star might be a frozen ball of ice circling billions of kilometers away. Defining a realistic set of orbital characteristics can involve the use of a lot of hard science. Do the planets in a system follow an elliptical or a circular orbit? What's the length of the year and the axial tilt for each planet? How fast do the planets rotate? Generally, you can use your imagination to create the details of a system and its particular planets. However, knowledge of some basic astronomical concepts can add depth and realism to your campaign—qualities that most roleplayers value greatly.

Length of Year

A planet located close to its star travels faster in its orbit and makes one circuit around the star more quickly than a planet located farther away. In our solar system, the length of a planet's year varies from about 90 days for Mercury to almost 250 years for Pluto. In one Earth year, our planet travels about 940 million kilometers in its journey around the Sun, while Venus travels more than 1 billion kilometers in the same length of time.

From a gaming standpoint, the outer planets in a system don't move any appreciable distance in the course of a typical adventure—even

The Sol System

Since we have a full set of information about the star system to which Earth belongs, our system is available to use as a baseline model for the design of other systems. If you want exacting accuracy, you can easily find hundreds of books that contain detailed facts about Earth and its neighboring planets. Here's a brief statistical summary for use in Sol-based campaigns.

Planet	Orbital Distance	Length of Year	Eccentricity (circle = 0.0)	Inclination (° of variance)	Axial Tilt	Length of Day	Mass (Earth = 1)	No. of Moons
Mercury	0.4 AU	88 days	0.21	7	0	59 days	0.05	0
Venus	0.7 AU	243 days	0.01	3.39	-2.6	243 days	0.8	0
Earth	1.0 AU	365 days	0.02	0	23.5	24 hrs	1.0	1
Mars	1.5 AU	687 days	0.09	1.85	24	24.6 hrs	0.1	2
Jupiter	5.2 AU	11.8 years	0.05	1.3	3	9.9 hrs	318	16
Saturn	9.5 AU	29.5 years	0.06	2.49	27	10.7 hrs	95	20
Uranus	19.2 AU	84.0 years	0.05	0.77	98.4	17.2 hrs	14.5	17
Neptune	30.1 AU	165.8 years	0.009	1.77	29	16.1 hrs	17	8
Pluto	39.4 AU	248.5 years	0.25	17.2	94	6.4 days	0.002	1

one that takes weeks or months to complete. However, inner planets can move a significant distance in even a relatively small period of time. If it's important to know how far away two inner planets are from one another at a given time, see "Planetary Alignment" on page 156 in *Chapter 11: Spaceships* for advice on how to make this determination.

Eccentricity

The orbits of some bodies in a star system may be exactly or almost exactly circular; most of the planets in our system have this characteristic, and are said to have orbits of low eccentricity. Other orbits—such as those of many comets—are greatly elongated ellipses. A world with a highly eccentric orbit would be much closer to its sun during particular times of the year and farther away during others. The temperature and the length of the seasons on such a world would vary markedly during the course of a year.

Inclination

The orbits of most satellites—including moons revolving around planets, as well as planets revolving around stars—lie along or very close to the plane that passes through the equator of the body they're orbiting. Scientists call this the *ecliptic plane*. If you viewed a typical star system from the side, you'd see the planets were aligned horizontally, with no real difference in "elevation" above or below the rest of the system.

However, some bodies may break this rule. For example, Pluto's orbit slants off the ecliptic plane, so that it sometimes hangs "above" the other planets and sometimes "below" them. Comets and asteroids often have inclined orbits, too.

Axial Tilt

While orbital inclination deals with the *revolution* of a planet in relation to the ecliptic plane, axial tilt deals with a planet's *rotation* in relation to the ecliptic plane. If a planet's ecliptic plane is exactly aligned with the ecliptic plane of its star, then the planet has an axial tilt of 0°. However, the two ecliptic planes don't necessarily line up; in our solar system, Mercury is the only planet with an axial tilt of 0°. The plane of the Earth's equator (and therefore, the line of its axis) is tilted about 23° from the plane of its orbit.

The axial tilt of a planet governs the seasonal variation of its weather. The Earth's north pole is inclined away from the sun during winter in the northern hemisphere, and as a result that half of the planet receives less light and less heat than it does in the summer. A planet with an extreme axial tilt will have severe differences in seasons—extremely hot summers and extremely cold winters—while one with a mild axial tilt will have little variation from one season to another.

Length of Day

As a result of their formation, most bodies in space spin on an axis. The velocity of this spin dictates the length of a planet's day. Without rotation, one side of a planet would eventually superheat from an endless stream of daylight, while the other side would freeze in eternal darkness.

Relative to Earth's 24-hour period of rotation, a planet's day might be extremely short (Jupiter rotates once every 11 hours) or extremely long (Venus rotates once every 243 days).

When a planet or moon orbits too close to its parent star or planet, it eventually becomes tide-locked. The satellite's rotation is halted by the pull of the larger body's gravity, and it circles with the same face always turned toward its primary. Earth's own Moon is an example of a tide-locked satellite.

Planetary Environments

Now that all the bodies in your system have been identified, it's time to get down to details about what it's like on or near the surface of each of the system's planets.

A full discussion of planetary environments ranges through a lot of topics, but at the heart of the issue is one fundamental question: Is the planet in question suitable as a home for life? Specifically, can heroes walk about unprotected, can they survive and be comfortable while wearing only respirators, or do they have to be decked out in fully sealed protective suits? Can life as we know it evolve on the world? If not, is it capable of supporting some kind of weird biochemistry?

Just because a planet is of an appropriate size and orbits at a favor-

able distance from its star doesn't mean that it automatically spawns life. The geological chemistry of a world is crucial in determining the quality of its atmosphere, the effect of that atmosphere on temperature and habitability, and the presence of free water and free oxygen.

Planetology is an involved field of study, and it's not necessary to explain the reactions necessary for the development of an Earthlike environment. For game purposes, the end result is what matters.

The overall habitability of planets and other stellar bodies is summarized in the five planetary classes described below. By using these categories in conjunction with the GRAPH system (described in *Chapter 3: Gamemasters in Action*), you can draw a fairly complete picture of a planet's total environment.

TABLE G64: PLANETARY ENVIRONMENTS provides a system for randomly determining the general physical characteristics of a planet. If you prefer, you can read through the descriptions that follow and make your own decision about what kind of environment a certain planet represents.

Class 1

Planets and moons with Class 1 environments require characters to take few, if any, protective measures in order to survive; the raw materials needed to support life exist in abundant supply. Some conditions might modify the environment to an extent (arctic cold at the poles, an atmosphere denser than Earth normal, and so forth) have little effect on the overall habitability of these worlds. For instance, it's possible for a Class 1 world to have a toxic atmosphere—but the toxic element would be merely a mild irritant, or would only be present at certain altitudes or in particular areas.

Of the planet types listed on Table G64, the three temperate worlds are the most likely to be Class 1 environments. A hot world (if it isn't too hot) can be a Class 1 locale, as could a cold planet.

Class 2

Unprotected humans exposed to a Class 2 environment will die over the course of days, hours, or even minutes. However, special equipment offers protection against the harmful effects of a Class 2 environment. Special insulated or refrigerat-

TABLE G64: PLANETARY ENVIRONMENTS

Temperate worlds					Life		Ocean		Hot worlds					Life		Ocean			
1-2	Class 4	G1/R4/A0/P0/H0	—	—	1-3	Class 4	G1/R3/A0/P0/H5	—	—	4-5	Class 3	G1/R3/A3/P1/H5	VI	1	6-7	Class 3	G1/R2/A3/P2/H4	VI	1-2
3	Class 3	G1/R2/A3/P1/H4	III	1-2	8	Class 2	G1/R3/A3/P2/H4	III	1-3	9	Class 2	G2/R2/A3/P3/H3	III	1-4	10	Class 1	G2/R3/A2/P2/H3	I	1-4
4	Class 3	G1/R2/A4/P2/H3	V	1-3	11	Class 1	G2/R2/A2/P3/H2	I	1-5	12	Class 1	G2/R1/A2/P4/H4	I	1-6	13-14	Class 2	G3/R1/A3/P4/H4	III	1-5
5	Class 3	G1/R2/A3/P2/H1	IV	1-4	15-16	Class 3	G3/R2/A4/P4/H5	V	1-3	17+	Class 5	G4/R1/A4/P5/H5	—	—					
6	Class 3	G1/R2/A1/P2/H1	II	1-5															
7	Class 2	G1/R1/A2/P2/H3	I	1-5															
8	Class 2	G2/R1/A2/P2/H1	I	1-6															
9	Class 1	G2/R1/A2/P3/H3	I	1-7															
10	Class 1	G2/R1/A2/P3/H1	I	1-7															
11	Class 1	G2/R1/A2/P3/H2	I	1-6															
12	Class 1	G2/R1/A2/P4/H2	I	1-7															
13-14	Class 1	G2/R1/A3/P3/H2	I, III	1-7															
15	Class 1	G2/R1/A1/P3/H2	I	1-7															
16	Class 2	G3/R1/A2/P4/H3	I	1-6															
17	Class 2	G3/R2/A2/P4/H1	I	1-7															
18	Class 3	G3/R2/A4/P4/H2	V	1-6															
19	Class 3	G4/R3/A4/P4/H4	V	1-6															
20	Class 3	G4/R0/A1/P4/H1	II	1-5															
Gas giants					Life		Ocean		Cold worlds					Life		Ocean			
1-16	Class 5	G5/R3/A1/P5/H0	—	—	1-5	Class 4	G1/R3/A0/P0/H0	—	—	6-8	Class 3	G1/R2/A3/P1/H0	IV	1-2	9	Class 2	G1/R2/A1/P1/H0	II	1-2
17	Class 3	G4/R1/A1/P5/H0	—	—	10	Class 2	G2/R1/A1/P2/H1	I, II	1-3	11	Class 2	G2/R1/A2/P3/H1	I	1-4	12	Class 1	G2/R1/A2/P3/H2	I	1-5
18	Class 3	G4/R1/A1/P4/H0	II	—	13	Class 2	G2/R1/A2/P4/H1	I	1-6	14-15	Class 2	G3/R1/A1/P4/H1	I, II	1-5	16-17	Class 2	G3/R1/A1/P4/H0	II	1-4
19	Class 3	G4/R1/A2/P4/H0	II	—	18	Class 3	G4/R1/A1/P4/H0	II	1-3	19-20	Class 3	G4/R1/A3/P4/H0	II, IV	1-3					
20	Class 3	G4/R1/A2/P4/H1	I, II	—															

For Terran planets and small gas giants, roll d20 to determine environment type; for sub-Terrans, roll d12; for super-Terrans, roll d12+8; for large gas giants, roll d12+5.

Life: If a planet is capable of supporting native life, an entry here lists the possible type(s). See TABLE G68: LIFEFORMS.

Ocean: If a planet can have oceans, a roll of d8 that falls within the given range indicates oceans are present. See TABLE G65: OCEANS.

ed suits can negate the effect of extreme temperatures, respirators take care of imperfect or thin atmospheres, and so on. Many places on Earth blur the line between Class 1 and Class 2 environments—for example, the peaks of the highest mountains, the poles, or the worst desert conditions. As noted above, these localized deviations wouldn't change the fact that Earth is in broad terms a Class 1 environment.

Class 2 environments are most often found on cold worlds, but a proportion of hot and temperate planets may fall into this category. Settlers can establish homesteads in these areas, but it's a struggle to find the necessities of life. For example, colonists on Mars would require a pressurized, heated dwelling and a source of water and oxygen.

Class 3

This type of environment is basically incompatible with unprotected human existence. Extensive life sup-

port is required even for short visits. Most Class 3 environments have several deadly characteristics, so that a number of life-support systems (respiration, temperature control, etc.) are required.

On Earth, the bottom of the ocean and the inside of an active volcano are examples of a Class 3 environment. Any planet that possesses an atmosphere could be the home of a Class 3 environment (airless worlds are considered separately in Class 4, below). Establishing a large human settlement in a Class 3 environment probably isn't possible, although humans could build permanent stations or facilities in these areas.

Class 4

A Class 4 environment is open to space, with no atmosphere, very little (if any) gravity, and no temperature regulation. To survive in space or on the surface of an airless world, a person would have to bring everything he or she needs—including

food, water, shelter, and air. Explorers might build space stations or mining outposts in Class 4 environments, but no one would attempt to colonize these areas.

Any planet type that has little or no atmosphere qualifies as a Class 4 environment—which rules out only gas giants and super-Terran worlds as possible Class 4 sites.

Class 5

These environments are beyond the pale of human experience. Deep inside the atmosphere of a gas giant, the incandescent plasma of a star's corona, or the molten interior of an Earthlike planet are examples of Class 5 environments. Unless the characters make rigorous preparations with highly specialized gear, they don't have a chance of surviving an encounter with a Class 5 locale—and some of these environments are simply lethal no matter how much protection a character might have.

DESIGNING PLANETS

The environment class and GRAPH ratings of a planet provide only the most basic information about the world; they represent the extent of the facts scientists can garner from long-distance observation. When a survey team enters orbit for a closer look, the explorers can unearth more details about the physical structure and chemical cycles of the planet. This level of analysis, called planetology, uses many sciences—including chemistry, oceanography, and climatology—to determine the life-bearing potential of a planet.

Physical Chemistry

This science concerns itself with the elemental composition of planetary bodies. Although each planet has a unique chemical makeup, worlds with similar environmental characteristics contain similar elements.

Inferno and Super Torrid Worlds

A planet with an H5 or H4 designation is generally rocky or metallic. Its close proximity to its star prohibits the presence of an atmosphere—unless the planet is very large or possesses unusually heavy elements (carbon dioxide, neon, or sulfur dioxide, for example). Lighter gases are very likely to have been blown away from the planet during its primary star's formation.

► A *toxic* (A3) atmosphere on an inferno or super torrid world is made of metallic vapor such as iron carbonyl, or possibly some form of sulfur compound.

► A *corrosive* (A4) or *super corrosive* (A5) atmosphere on an inferno or super torrid world may be made of sulfuric acid or carbonic acid.

► A *dense* (P4) atmosphere may include water vapor, carbon dioxide, or neon.

► A *crushing* (P5) atmosphere on an inferno or super torrid world indicates a Venuslike environment, with a mantle of carbon dioxide.

Life may exist on an inferno world, though such life wouldn't be carbon-based. A super torrid world could have carbon-based lifeforms, but the

natives wouldn't necessarily be oxygen breathers, and they would have to be able to tolerate temperatures higher than the boiling point of water.

Torrid, Temperate, and Frigid Worlds

For worlds of these types (H3, H2, H1), all of which are more or less Earth-like in composition, the details of oceanic and atmospheric makeup are quite variable.

► A *toxic* (A3) atmosphere on worlds of these types may include heavy concentrations of chlorine or fluorine, carbon dioxide, or hydrogen cyanide.

► A *corrosive* (A4) or *super corrosive* (A5) atmosphere may include strong concentrations of sulfuric, carbonic, nitric, or hydrochloric acid.

► An *inert* (A1) atmosphere may contain a large amount of neon or argon, or free nitrogen. Methane or ammonia may dominate on colder worlds.

Torrid, temperate, and frigid temperature bands are favorable for the development of life. Both carbon-based lifeforms and, on cool planets, lifeforms that breathe sulfur compounds may exist on worlds with these environmental characteristics.

Absolute Zero Worlds

Often referred to as "dirty snowballs," these are made of ice mixed with a variety of other substances such as ammonia, methane, or carbonaceous rocky compounds. Pluto is a good example of an absolute zero world.

Some absolute zero worlds may support hydrogen-breathing life in hydrocarbon seas. However, life is unlikely to exist at temperatures that approach absolute zero.

Gas Giants

Typically useful as sources of hydrogen, gas giants may possess heavier gases, such as nitrogen or oxygen, that "sink" to a lower level within the planet's gaseous envelope, stratifying like a parfait. Explorers might find indigenous life on a small gas giant with a structure of this sort.

Oceanography

The science of oceanography is the study of the composition of oceanic bodies and their interaction with the

world on which they exist. The presence of a liquid ocean requires an atmosphere: liquids boil off in a vacuum. Many planets with atmospheres possess such free-standing liquid bodies. On a world that's neither extremely hot or extremely cold, oceans moderate the planet's temperature and climate, acting as a massive heat reservoir. Depending on a planet's temperature, an ocean may or may not be composed of water; a planet like Mercury might have oceans of liquid lead, tin, or iron compounds.

► An *inferno* (H5) or *super torrid* (H4) planet may have oceans or seas of molten sulfur, tin, rock, or iron compounds.

► A *torrid* (H3) or *temperate* (H2) planet may have seas of water, or nitric, sulfuric, or hydrochloric acid.

► A *frigid* (H1) planet may have seas of water or a water-ammonia mixture. Extensive portions of the ocean's surface may be frozen.

► An *absolute zero* (H0) planet may have frozen seas of ammonia, hydrocarbons, or water.

TABLE G65: OCEANS determines the extent of a planet's oceans according to the environment class of the planet. Roll d8 and cross-reference the result with the planet's environment class.

Sparse oceans are small, land-locked seas or frozen ice caps, covering about one-quarter of the planet. These bodies are small and shallow, vulnerable to climatic shifts, and offer little insulation against planetary temperature shifts.

Moderate oceans are large, land-locked seas or extensive ice caps that cover roughly half the planet. Moderate oceans are extensive enough to alter the planet's climate pattern and can withstand major climatic shifts.

Abundant oceans cover most of the planet's surface, dividing the continents from each other. Earth is an example of a planet with abundant oceans.

Complete oceans cover the planet, with only a few islands rising above the waves. Convection from the equatorial to the polar regions will exert a strong equalizing influence on the planet's climate.

Many scientists consider a thalassogen, an ocean-forming compound, to be a requirement for any kind of life. Water appears to be the most prolific thalassogen, but ammonia

could also have the necessary qualities to engender life. Other possible thalassogens are molten sulfur, sulfuric acid, hydrogen fluoride, and iron carbonyl. Of course, worlds with large amounts of these elements aren't suitable for unassisted human habitation.

Climatology

This science is the study of a planet's climate—all the variations of temperature, precipitation, wind velocity, and general habitability that might occur on a planet's surface. A planet's climate is a measure of the violence or extremity of its weather patterns.

Sometimes, generally uninhabitable worlds contain areas in which the climate differs greatly from the planetary norm. For example, a planet with a crushing or toxic atmosphere might have a small, habitable area on its mountain peaks, while a frozen world might have a narrow band of habitable territory at the equator.

TABLE G66: CLIMATE determines the severity of a planet's climate according to the environment class of the planet. Roll d8 and cross-reference the result with the planet's environment class. (Class 4 worlds are not considered because a planet with no atmosphere can't have a climate; Class 5 planets are disregarded because the environment is so brutal that climate is irrelevant.)

► **Note:** Add 1 to the die roll if the planet has sparse oceans or no oceans, and add an additional 3 if the planet is a gas giant. If you've decided that the planet has an extreme axial tilt or a fast rotation rate, add 1 for each of those conditions that applies. If the planet has a mild axial tilt or a slow rotation rate, subtract 1 for each of those conditions.

A *calm* climate is placid by Earth standards, with little variation. Storms are infrequent, winds are gentle, and the seasons aren't very pronounced. A planet with a calm climate has fairly uniform and predictable temperatures. If Earth had a less severe axial tilt or a slower rotation rate, its climate might fall into this category.

An *active* climate is similar to what we experience on Earth: distinct seasons, intense winds and storms, and a surface temperature that fluctuates by as much as 100° C

TABLE G65: OCEANS

Class 1	Class 2	Class 3	Extent
1	1-2	1-4	Sparse
2-3	2-5	5-6	Moderate
4-6	6-7	7	Abundant
7-8	8	8	Complete

TABLE G66: CLIMATE

Class 1	Class 2	Class 3	Severity
1	1	1	Calm
2-4	2-3	2	Active
5-7	4-6	3-5	Turbulent
8	7-8	6-8	Violent

from the coldest time of year to the hottest.

A *turbulent* climate is somewhat more vigorous than an active one, with a wider range of temperatures and more powerful storms and winds. Mars has a turbulent climate; its dust storms can last months or years, and its polar caps virtually disappear during summer. Humans need special protection when visiting or settling on a planet with this kind of climate.

A *violent* climate has an even more drastic temperature range, constant storms, and destructive winds. The atmosphere of a Class 3 gas giant almost always falls into this classification. Even if a planet with this type of climate is otherwise habitable, its weather patterns may make colonization virtually impossible. Saturn and Neptune are examples of worlds with violent climates; scientists have noted wind velocities in excess of 1,500 kph in their clouds.

Geology

How convoluted is a planet's surface? Is its crust broken into tectonic plates, or is it fused into one solid mass? How many of its physical features are the result of meteor impacts and collisions with other bodies? Questions of this sort are answered as part of the study of a planet's geology.

You can sculpt the landscape of your worlds as you desire. However, not everyone has the time necessary to map out a full geological blueprint of every planet. You can use

TABLE G67: LANDFORMS to determine a planet's general landscape. Roll d8 and cross-reference the result with the planet's environment class.

► **Note:** Disregard the issue of landforms for a gas giant (which has no land). If the planet has one or more moons or if it's a sub-Terran world, add 1 to the die roll for each of those conditions that applies. If the

Mapping a Planet

On the facing page is a Sample World Map that shows one way you can depict the major physical features of any planet you design. This map has been drawn out on paper printed with a hexagonal grid, but you can use a square grid or even blank paper if you so desire.

By outlining a shape made up of triangles, as shown, you can cut out the map image, fold it, and fasten the edges together to create a rough spherical shape that shows what your world looks like in three dimensions. If you don't find that sort of visualization necessary, you can simply draw two circles to represent the hemispheres of the planet and put your map features down on that surface.

At this stage of design, great precision isn't necessary; it's sufficient for your world map to identify the general shape of major land masses and the location of big features such as mountain ranges and large rivers.

TABLE G67: LANDFORMS

Class 1	Class 2	Class 3	Class 4	Class 5	Profile
1-2	1	1-3	1	1-6	Smooth
3-5	2-3	4-6	2-3	7-8	Varied
6-7	4-6	7	4-5	—	Rugged
8	7-8	8	6-8	—	Perilous

planet is a super-Terran, or if it has a corrosive (A4) or super corrosive (A5) atmosphere, subtract 1 for each of those conditions that applies.

Smooth landforms indicate a geological landscape less pronounced than Earth's. A planet with smooth landforms has fairly low and flat mountains, shallow seas, and a dearth of spectacular geological formations (like the Grand Canyon). In addition, these planets don't have much volcanic activity. Venus is an example of a planet with smooth landforms.

The category of varied landforms describes a range about the same as Earth's, with active plate tectonics and a moderate amount of volcanism. Earth's highest mountains rise

almost 10,000 meters above sea level, and its deepest ocean trenches are roughly 11,000 to 12,000 meters below sea level.

Rugged landforms are significantly more exaggerated than Earth's. Unusually light gravity leads to higher and sheerer mountains and peaks. On very massive worlds, a rapid rotation rate may offset heavy gravity enough to allow the formation of high mountains. The planet's crust may or may not feature tectonic plates. Major asteroid or meteor impacts may create features even more extreme than those created by normal volcanism. Mars is a planet with rugged landforms.

Perilous landforms are even more pronounced than rugged landforms.

Very light gravity or extreme tidal forces may seriously deform a planet's crust, allowing all kinds of dramatic buckling and sheer terrain. Perilous landforms may provide access to a planet's interior or may feature a mountain that extends miles above the rest of the world's surface.

Life

One of the most fascinating aspects of science fiction roleplaying is the possibility of interacting with alien life forms. As discussed earlier, the frequency of alien encounters depends entirely on the type of campaign you wish to run. The following information contains suggestions on populating your universe with life.

Sample World Map



Generally, the environment class and characteristics of each randomly generated planet dictate what series, or biochemical type, of life might evolve there. The "Life" column on TABLE G64: PLANETARY ENVIRONMENTS lists one or two series of life that might exist on a planet of a certain type. To randomly determine the chance of life on a planet that's capable of supporting life, refer to the appropriate line(s) on TABLE G68: LIFEFORMS and roll d8. If the result falls within the range given in the "Odds" column, then the planet does contain lifeforms belonging to the series in question.

Just as with other steps in this process, you can skip the random determination and simply dictate that life exists on a planet if that's what you want to happen.

Primordial Life

Before advanced civilizations can develop on a planet, the lifeforms on the planet must evolve from their beginnings as extremely simple organisms. For example, during most of Earth's history, the planet was covered with nothing more advanced than organic goo. Algae and primitive one-celled microbes were the only lifeforms present. If a party of space explorers happened to visit during this period, they wouldn't have seen anything more than the potential for higher life.

If you prefer random determination, assume a 75% chance (1-6 on d8) that life on a planet is too simple to be anything more than scientifically interesting to a typical group of heroes. They land, take some readings and perhaps some samples, scrape the mud off their boots, and take off again—end of adventure!

You can, of course, ignore this die roll and fill any planet you like with highly evolved life. Or you can set up a story situation that transforms the presence of primordial sludge into an exciting adventure. For example, the heroes could land on a primordial world only to discover that an alien species is genetically tinkering with the world's evolution. Perhaps these aliens are merely curious, or perhaps they have more nefarious designs. Either way, the heroes would have to deal with the possibly horrifying results of the aliens' experimentation before confronting the interloping extraterrestrials themselves.

TABLE G68: LIFEFORMS

Series	Base	Breathes	Odds
I	Carbon	Oxygen	1-5
II	Hydrocarbons	Hydrogen	1-3
III	Carbon	Chlorine	1-3
IV	Carbon	Sulfur trioxide	1-2
V	Silicone	Oxygen	1-3
VI	Fluorosilicones	Sulfur dioxide	1

Higher Life

If a life-bearing world has matured past the primordial stage, almost any type of life might exist. For example, Earth's diverse biosphere includes everything from ash trees to zebras. If you looked at these two organisms from afar, you'd see very little to indicate that they shared the same world. However, their relationship is clear on the cellular level, since all Earth-based life shares some basic biochemical and genetic properties.

A planet's biosphere could include millions of species. You probably don't have time to delve that deeply into the creation of so many lifeforms—but you don't have to. Assume that a planet containing higher lifeforms has diversity equivalent to that on Earth unless you specifically decide otherwise. In other words, the planet has photosynthesizing plants that range from algae to grasses and trees, simple filter-feeding animals analogous to corals and sponges, herbivores of various sizes and shapes, and carnivorous creatures.

You might consider making some universal changes to this Earthlike world—changes that will help your players see their heroes as explorers on a strange planet. For example, Earth plants are green because of the chlorophyll they contain—but the vegetation on a different planet could run through the entire spectrum of colors. A few purple and striped plants go a long way toward defining an alien setting.

Another universal change you could employ is the elimination of certain classes or orders of life. For example, what if trees never evolved on the planet? Or fish? Maybe the world's largest plants are rambling shrubs or tough, tall grasses. Maybe mollusks and arthropods diversified and evolved into a great number of free-swimming species.

In addition, you can always introduce new orders of life, or drastically expand the roles of existing ones. Take a look at some of the branches that have died out in Earth's evolutionary tree. Trilobites, armored fish, and dinosaurs are organisms that had their day and died off—but what if they hadn't? New orders might include species of living balloons, land-going echinoderms, or anything else you might think of.

If you're thinking about creating a number of alien creatures for a substantially alien ecosystem, research basic biology—there's a lot of weird stuff on Earth that might provide some good departure points for populating your alien world. Remember, you're interested in Earth analogues here, creatures that fit into roles and descriptions roughly equivalent to animals that live on Earth.

Finally, you might describe a planet on which life is possible in some places but impossible in others. A good example would be Earth in the Cambrian period (about 500 million years ago), when all animal life swam in the ocean because no land-dwelling animals had yet developed. What if life on a particular planet existed only in valleys, on mountaintops, or along narrow equatorial bands? Perhaps life on this world enters long periods of hibernation due to climatic extremes. Whatever you decide, the result is sure to convey an alien "feel" to your world.

Organizing Lifeforms

When heroes explore a new planet, you don't have to concern yourself with every new lifeform that crosses their path. Describe those that fall into one of five general categories:

► Aggressive carnivores or scavengers.

► Aggressive herbivores that actively defend themselves from perceived threats.

► Plants and animals with passive defense mechanisms that may prove dangerous.

► Pests, vermin, or parasites that may attack through blind instinct.

► Creatures of scientific interest or with unusual properties.

Basically, if a creature isn't going to attack the heroes and doesn't possess anything useful, you don't have to spend hours (or even minutes) detailing it. Alien rabbitoids or small grazers function only as part of the scenery. Of course, don't let your players know that these are unimportant creatures—let them think that anything on the planet might prove dangerous or significant to their heroes.

Intelligent Life

The guideline for the presence of intelligent life on any planet you're describing for your campaign is simple: Put it there if you want. However, intelligent life shouldn't exist just anywhere in your game setting. When a science fiction writer includes intelligent aliens in his story, he does so deliberately, with a specific purpose in mind. You should do the same. Unless you know why an intelligent species exists and what kind of interaction the heroes might have with it, don't put it into your campaign.

It's important to note that intelligence doesn't necessarily imply technological advancement or civilization. Imagine a world where solitary carnivores, such as tigers or bears, have risen to sentience. They wouldn't need to develop tools, because their natural weapons function quite well against their prey. Nor would they need to develop social skills such as language or organization. However, they could be brilliant hunters, trackers, or fighters as individuals.

A small selection of alien life-forms appears in *Chapter 17: Creatures & Aliens*. These creatures aren't presented as universal "monsters" for the heroes to fight—although you can use them that way if you like. They're intended to provide a model for you to follow when you make up aliens for your own campaign.

CREATING CIVILIZATIONS

Now that you've detailed your star systems and the planets contained within them, you can begin creating the civilizations and cultures that make up your universe. Like other aspects of campaign design, you should feel free to utilize the suggestions and information contained below, or modify them to reflect the realities of your setting.

Begin the design of a civilization, culture, or society by considering the following basic questions:

► What do the people eat? What do they wear? What kind of shelter do they use?

► What is the physical geography of their homeland?

► What are the primary industries or resources of the world, nation, or outpost?

► How much contact do the people of this society have with other nations or worlds?

► What is the primary form of government?

► How much leisure time do people have, and what do they do with it? What do they consider art?

► Which characteristics are valued by the members of the culture? Which ones do they abhor?

► How strong are the forces of law and order? Does the government enjoy popular support?

► Who are the enemies of the state or world?

► What is the role of the heroes in their home state, world, or society? How much wealth, authority, and social clout do they wield?

Don't be afraid to let your players do some of this brainstorming! If a player wants to run a mercenary from the planet Urzog, ask him to sketch out some historical and cultural aspects of Urzog. You can always modify the player's ideas in order to fit the world into your setting, but in many cases the best worlds and cultures arise from the joint effort of two or more creative people.

Human Civilization

Whether or not a planet has its own native biosphere, humans may establish their own bases and outposts there. On such a world, the heroes

are presented with an existing society with which to interact—a colony, a trading post, a spaceport, even a major city. Heroes may undertake all kinds of adventures in and among humans or humanlike aliens, ranging from corporate espionage to outright warfare. Alternatively, a human civilization may serve as a haven in the campaign universe, a place where the heroes can rest and recuperate from adventures elsewhere. When you design such a human-created or human-led society, you should consider its Progress Level, Civilization Level, Law Level, culture, and economy.

Progress Level

Chapter 9: Goods & Services in the Player's Handbook describes Progress Levels, which measure a region's or society's technological development. A campaign using a contemporary setting might be based on Progress Level 4 or 5, while the baseline for a science fiction campaign will usually be PL 6 or higher.

However, a science fiction setting doesn't always require superior technology. An alternate history or future Earth campaign might place the heroes in a world of postholocaust savagery. Similarly, many people live in societies where high technology exists, but is not widely available. In a futuristic starfaring campaign, unspoiled or undiscovered planets might exist whose technological advancements lag behind the Progress Levels of the capital worlds.

A colony, outpost, or civilization on another planet is likely to have a Progress Level of at least 5, since the humans on this world must have used space flight to get there. Sometimes, a colony might regress to a state of near savagery due to disaster, warfare, or disease, but a Progress Level lower than 3 would be unusual.

Some colonies may voluntarily eschew technology, preferring a simpler way of life for religious or philosophical reasons. Again, PL 3 or 4 would be about as low as modern humans could tolerate, even in a pastoral world.

If the planet in question is extremely hostile to human life (say, a Class 3 or a harsh Class 2 world), the Progress Level couldn't fall lower than 6. This would represent the min-

imum level of technology necessary to maintain human existence under these conditions.

Civilization Level

Civilization Level (CL) is a rough measurement of the extent to which a world has been settled, and a gauge of its amount of resources. This is the second characteristic of a human civilization that you should consider during the design phase.

CL 0: Uninhabited

On a world at this CL, no settlements or installations presently exist. The ruined remains of a temporary survey camp or an unmanned science station would represent the extent of human enterprise on the planet. No special resources are available; any skill check a hero might make to locate or discover such materials will automatically fail.

CL 1: Unique

Only one small to moderate human settlement or outpost exists on the planet. A solitary mining post, a manned science station, or a small colony with a population of 1,000 or less is in this category. Resources are very limited; a +3 penalty applies to all skill checks involving a search for specific equipment, parts, materials, or specialists.

CL 2: Scattered

A handful of small settlements or outposts exist on the world, separated by vast unexplored or unsettled stretches. A young but growing colony falls into this category, as well as a world with widespread mining operations and a number of mining posts. Population is roughly 10,000. Resources are limited, so heroes have a +2 penalty to locate unusual materials.

CL 3: City

The planet contains one large settlement or several good-sized ones. The total population exceeds 100,000. Modest spaceport facilities may be available. Resources may be rationed or expensive, but are usually available. Some heavy industry is possible. A +1 penalty applies to all skill checks involving the location of unusual materials.

CL 4: Nation

Several large cities or colonies, with extensive infrastructure and independent manufacturing, exist on the planet. The world produces most of what it needs, and may even export refined or finished goods to other planets. The population may be as high as 1 to 10 million, and no penalty applies to an attempt to locate resources.

CL 5: Continent

A number of large cities, or several nations, exist on the planet, which has a total population of about 100 million. Almost all significant industries are present, and the world is self-sufficient. Unusual materials or resources are easy to locate (-1 bonus), and several excellent spaceport facilities exist on the planet.

CL 6: World

Several continents are settled, with hundreds of large cities. The total population is roughly 1 billion. Extensive industrial capacity allows major export trade, and a number of excellent spaceports may be available. Very few resources or materials out of reach; heroes receive a -2 bonus when attempting to locate unusual or rare materials.

CL 7: Improved World

Several continents possess dense settlements, and minor colonies may have been developed in arctic, aquatic, or near-orbit locations to increase the planet's capacity. The population is roughly 10 billion, and any native civilizations or ecosystems are largely overshadowed by a human presence. A minimum Progress Level of 5 is necessary to maintain this Civilization Level. Characters get a -3 bonus when attempting to locate usual or rare materials.

CL 8: Megapolitan World

All continents are densely settled, and extensive submarine and orbital habitats also exist. Worlds of this level possess productive industry of all kinds. Native ecosystems are virtually nonexistent. Colossal spaceport facilities are the norm, and the population may range as high as 25 or 50 billion. A minimum Progress Level of 6 is necessary to maintain this civilization. Resources are plentiful (-4 bonus).

Law Level

No matter where or when your campaign is set, the forces of law and order have a role to play. Heroes naturally find themselves dealing with criminals and other unsavory elements. In addition, some heroes may carry unregistered firearms, break laws in pursuit of villains, and even rebel against authority. A knowledge of the relative levels of law and order is essential when fleshing out a world or system. Such information adds a layer of color and detail to the setting and may even impact on the heroes' actions.

Law Level describes a civilization's government in terms of its degree of organization and the extent of the power it wields. One unique characteristic of each level is a modifier (bonus or penalty) that applies when heroes attempt illegal acts. Failure indicates that local law officials notice the attempt. Incarceration or corporal punishment isn't automatic in such cases—but this could be the consequence of a Critical Failure. Even then, you shouldn't let a die roll change the course of the story completely. Feel free to ignore or modify any results you deem detrimental to the plot. Reverse this modifier, from a bonus to a penalty or vice versa, if the heroes try to make use of a local law agency to conduct an investigation or interfere with a criminal's activities.

Different settlements, cities, and nations around a world can have different Law Levels. As a general rule, a large civilization (CL 3 or higher) must have a Law Level equal to or greater than its Civilization Level, or else the society falls into anarchy.

LL 0: Anarchy

No law exists in a system or world with this classification—except the law of the jungle. This rating is generally very rare, since true anarchy is almost completely foreign to the human experience; even criminal organizations usually agree to abide by some kind of law. The modifier for this Law Level is -4.

LL 1: Tribal

No universal rules of conduct exist at this level, although local groups may develop extensive codes of right and wrong. The burden of securing justice falls on the wronged individual, who is usually free to take any ac-

tion he thinks appropriate. The modifier for this Law Level is -3.

LL 2: Feudal

The law exists to serve individuals in power. The local lord, satrap, crime boss, or big shot exercises authority only to defend his or her own position, or when a complaint makes it worth getting involved. While the local lord enjoys totalitarian power, the law extends only as far as his reach. Corruption is rife at this level. Justice tends to be either nonexistent or extreme, depending on who's pulling the strings. The modifier is -2.

LL 3: Civic

Communities agree to a basic standard of conduct, elementary civil rights, and some police organization beyond the big shot's personal leg-breakers. The reach of the law is still limited, and offenders who get out of town can usually escape justice. Corruption presents a serious problem. The modifier is -1.

LL 4: State

A number of communities share common laws and enforcement agencies. Within towns and cities, the legal authorities enjoy a reasonable range of powers and restrictions to protect individuals. Corruption is modest, but the elite still enjoy different standards from the common masses. There is no modifier for illegal action or interaction with legal authorities.

LL 5: National

The United States of the 1990s falls into this category. Except for minor details, all communities agree on the powers of police, the rights of the victims and the accused, and the extradition of criminals. Specialized law organizations handle certain areas of criminal activity. Authorities can hold a dangerous individual for a time, but must eventually charge the individual with some crime. The Law Level supplies a +1 modifier.

LL 6: Totalitarian

The authorities may use or disregard civil rights as they see fit, and they can place suspicious individuals under continuous surveillance. Courts and military authorities can order arrests or searches. While corruption exists, bribes and graft must be approached with the greatest delicacy. Unsanctioned violence is dealt with harshly. The modifier is +2.



Human strength versus t'sa speed

LL 7: Technocracy

Authorities use extensive surveillance, propaganda, and mind control without consideration of civil rights. Police are present in every home and place of business by means of spies or electronic monitoring. This is the highest Law Level tolerable to humans, and it represents an unnatural subjugation of the individual to the state. Governments are likely to reprogram criminals through surgical or psychological means. The modifier is +3.

LL 8: Nonhuman

The inhabitants are, by design or by nature, incapable of crime, and they support the efforts of any authority without reservation. A few alien societies might fall into this category. The modifier is +4.

Using Law Level

It's not necessary to make a sweeping statement that your entire universe is set at a specific Law Level. In frontier regions, the forces of law aren't as powerful and usually exist at a lower level than in core homeworlds or major cities. You can apply the modifiers to encounter scenes in

which the heroes attempt to use or avoid the forces of law, or to challenge scenes in which the heroes use skills such as Investigate.

Culture

What are the human inhabitants of this planet like? Why are they here, and what are they trying to make of the world? Usually, residents of colonies and research outposts adhere to the culture, language, and norms of whatever world they came from. Over the course of generations, their values and behavior may drift. If you've decided that humans exist on a random planet, you should consider where they came from and why they left that earlier location.

Sometimes, people found colonies specifically to experiment with a new social organization or a particular culture, or to support a certain belief or practice. This is a classic plot device of science fiction, with plenty of adventure possibilities. Use your imagination, but make sure that the situation you present will somehow threaten the heroes or demand action on the heroes' part to set it straight.

Possible Trade Commodities

Here's a short list of cargoes that a merchant vessel might carry, as well as the relative value and bulkiness of each item. This information might be useful for heroes working as traders, or to give you an idea how easy it is to obtain and transport such items. Commodities marked with an asterisk may be difficult to procure, or may be regulated.

Commodity	Value	Bulk	Commodity	Value	Bulk
Air vehicles	Moderate	High	Heavy machinery	High	Very High
Alcohol	Moderate	Medium	Industrial chemicals	Moderate	Medium
Art objects*	High	Low	Leather goods	Moderate	Low
Animals, exotic*	High	Medium	Lubricants	Moderate	Medium
Animals, working	Moderate	Medium	Lumber	Low	Medium
Beef/animal products	Low	Medium	Machine tools	Moderate	Medium
Building supplies	Moderate	High	Medical supplies*	Very High	Low
Clothing	Low	Low	Military vehicles*	Very High	High
Coffee/tea	Moderate	Low	Motors/engines	High	Medium
Computers*	High	Low	Munitions*	Very High	Medium
Contraband*	Very High	Low	Ore, raw	Low	Very High
Electronics	High	Low	Petroleum	Moderate	Very High
Entertainment goods	Moderate	Low	Plastics	Moderate	High
Farm machinery	Moderate	High	Radioactives*	High	Medium
Fruits/vegetables	Low	High	Refined metals	Moderate	High
Furniture	varies	High	Rubber	Moderate	Medium
Fusion generators	Very High	Medium	Soft drinks	Moderate	Medium
Gas (H, He, etc.)	Low	High	Stardrive units*	Very High	Medium
Grain/rice	Low	High	Water	Low	Very High
Ground vehicles	Moderate	High	Weapons*	Very High	Medium

Economy

Most people don't make a living from adventuring, exploring, or investigating. Rather, they use their skills to carve out a living for themselves in the mundane world (or galaxy). Despite their extraordinary adventures, even heroes must bow to the economic realities of the universe. Thus, it is important for you to flesh out (at least in part) the economic systems of your setting. Despite what you may think, this process doesn't require an advanced degree in macroeconomics. All you need is a loose outline that considers the following aspects of an economic system: currency, resources, and supply and demand.

Currency

What does your setting use as a medium of exchange? Money is a universal substitute for bartered goods. If you're a shoemaker, you don't have to carry the shoes you've made with you every time you go shopping, in the hope of working a swap; you can sell your shoes for cash, take that cash someplace, and exchange it for whatever you need. In order for currency to be viable, both the seller and the buyer must agree that it has value.

The simplest form of currency is materials that are valuable in and of themselves. Gold coins are tangible, usable wealth. Gemstones, crystals, power packs, and even ammunition can serve as basic commodities of exchange, especially in areas where stable currency is hard to find.

In most contemporary or near-future campaigns, it's probable that some universally recognized form of cash, maybe currency made of paper or plastic, is the favored means of exchange. More technologically advanced worlds might use debit cards or credit counters of some kind as a replacement for currency. A person could wire these counters to his bank account or "buy" a card of a certain value each time he gets paid. These cards can be personalized to a single user. A paranoid government might insist on building recorders or transmitters into a credcard or into the skin of its citizens, so it can monitor all transactions.

Resources

It isn't necessary or desirable to set up a complete economy for an entire setting. However, an understanding of a world's general economic situation will often give you a clearer picture of its cultural and technological background.

For example, an agrarian nation or world exports food, but needs to import manufactured goods such as tractors and combines. If you know that most people on this planet subsist on automated farming, you've instantly got an image of wide-open fields broken by robot silos and storage facilities. On the other hand, a world that exports radioactive ores must feature extensive mines and processing plants.

Supply and Demand

One rule that isn't likely to change in the future is the law of supply and demand. Plentiful and accessible goods are cheap; rare and hard-to-make goods aren't. Of course, there's also a big difference between subsistence items and luxury items. Starving people will generally buy food before they purchase a TV.

Designing a few trade routes can be helpful for a campaign in which economics plays a significant role. If Planet A, an industrial world, produces agricultural machinery for Planet B, then a ship can take tractors from A to B and return carrying food from B to A, reaping a small profit on both ends of the trip. You can even create a network or web of trade routes, adding depth and realism to your imaginary game setting.

Cities and Towns

While there might be an entire world out there to explore, even the most visionary characters won't interface with an entire planet at one time. So, to finish the job of detailing a civilization for your heroes, you may need to sketch out some quick descriptions of the cities, towns, or installations of that planet.

A city contains lots of people living close together. Try to think up two or three supporting characters for each particular city the heroes might visit. Players generally think in terms of a location's usefulness. For instance, if one town has a spaceport and the next town over is a mining camp, you've got two distinctive sites the heroes will want to explore when they visit the planet.

It's not strictly necessary to map out a city or town in any detail, unless you enjoy drawing maps. What you want to do is answer five basic questions about the community and record those answers, either on a sketched map or in some kind of notebook:

- ▶ Where will the heroes sleep?
- ▶ Where will they eat and drink?
- ▶ Where can they buy equipment, including weapons and ammo?
- ▶ Where are the bad guys?
- ▶ Where are the local law enforcers?
- ▶ Are there any special facilities or structures, and if so, where?

If you do choose to sketch out a map, a scale of 20 to 100 meters per hex for a small town or outpost is fairly reasonable. For a good-sized city, you may need to map at 200 to 400 meters per hex.

Stations and Installations

Outposts in hostile areas aren't likely to be spread out in isolated buildings. Each structure will possess a degree of defensibility and self-sufficiency. You usually don't need to sketch out every detail of a base or building meter by meter; you only need to do this when you're planning on setting a combat-heavy adventure in that facility.

Here's a short list of items you may want to include when mapping out a station of some kind:

- ▶ Access (airlock, main gates)
- ▶ Power generation and distribu-

tion (a power plant room for space stations)

- ▶ Life support facilities (oxygen and water storage tanks, heating and cooling machinery)
- ▶ Defense systems (small arms lockers, armories, gun turrets or missile bays)
- ▶ Vehicle storage and maintenance facilities
- ▶ Living quarters and lavatories
- ▶ Common areas (lounges, dining rooms, conference rooms)
- ▶ Food preparation and storage facilities
- ▶ Communications and surveillance (radio rooms, radar stations, security posts)
- ▶ Offices, laboratories, or workspaces
- ▶ Emergency facilities (lifepods, escape hatches, firefighting gear)
- ▶ Industrial machinery and control systems (an assembly line, automated mining or terraforming devices)
- ▶ Entertainment facilities

Remember, an outpost is just an empty shell without memorable supporting characters. If the heroes are using a mining station as the home base for their explorations, take some time to populate the installation with contacts or rivals. An isolated colony or station is a small town in and of itself, so treat it as such during the design phase.

Alien Civilizations

One of the pitfalls of many works of science fiction is a tendency to create aliens with human motivations and human emotions. This sort of alien may be fine for shoot-'em-up space opera, but if you're trying to design something *really* new, you'll have to use your imagination.

You could use Progress Level, Civilization Level, and Law Level to describe the basic characteristics of an alien civilization. However, these terms may not be accurate for a truly unique alien society. Aliens may have entirely different notions of organization, settlement, or government from those possessed by the humans in your campaign. It's helpful to consider several basic questions about any alien population you place on a planet:

- ▶ What do they want from the heroes, or from humans in general?

- ▶ What don't they want the heroes to find out about or take from them?
- ▶ How are they organized? Who will interact with the heroes?
- ▶ What are their settlements or ships like?
- ▶ What are the other features of their technology?
- ▶ What do they look like? What are their game statistics? When they fight, what are they trying to do—kill, capture, or drive off the heroes?
- ▶ Why are these aliens in your campaign?

Designing Mixed Civilizations

Humans and aliens often share planets in classic science fiction. In fact, humans might share a planet with a number of alien species. As a basic guideline, the sum of human and alien Civilization Levels shouldn't exceed 10, reflecting the fact that if one species has filled up a planet, there isn't much room for anyone else to settle.

◆ **Example:** Dave has created the planet Daybreak, inhabited by a large number of native tribes. He decides that the alien Civilization Level is 5, since the aliens have settled most of a continent. The human mining colonies located on Daybreak probably shouldn't have a Civilization Level of more than 5, since this would start to seriously crowd the natives. For one side to grow, the other must suffer. Of course, the humans could presently have only a small settlement. In this case, both sides still have room to grow.


The Finishing Touches

Regardless what kind of planet, city, or area you're describing, remember to be creative. Look for opportunities to wow your players with cities and sites that are every bit as memorable as the villains and the story.

The rules and information contained in this chapter function as a guideline for the creation of an exciting, three-dimensional campaign. Utilize or modify anything in this chapter to reflect the unique flavor of your own imagination. The goal is to create a setting where both you and your players have fun.

CHAPTER 15

ADVENTURE DESIGN

A blue-toned illustration of a dragon breathing fire at a knight in armor. The dragon is on the left, breathing a stream of fire towards the knight on the right. The knight is wearing full plate armor and a surcoat with a cross. The background shows a castle with a flag and a checkered floor in the foreground.

The basic structure of all adventures is simple: The Gamemaster presents a situation, the players make decisions for their heroes, and the Gamemaster provides challenge, combat, and encounter scenes in response to those decisions. The two different types of adventure design are spontaneous and *planned*. Don't be confused by these terms. Even spontaneous adventures require some planning to pull off.

SPONTANEOUS ADVENTURES

Designing a spontaneous adventure doesn't take long; all you need are a few notes to get the story under way. After that, you improvise in reaction to the decisions of your players.

Running a spontaneous adventure isn't quite so easy as designing it—you have to think fast to keep the story going every time your players decide what their heroes will do. To help you through that thinking process, you have a foundation of information to fall back on—a foundation consisting of a story idea, its background, a supporting cast, and the trigger that got the adventure started. Each of these elements is explained below; after you read the entire section, you'll have a clear picture of how they fit together.

The Story Idea

The basic idea behind your story can come from anywhere—a favorite book or movie, a player's suggestion, events in previous adventures, the daily news, real-world history, or even situations suggested by everyday life. You need to give your idea a science fiction spin (if it doesn't have that already) to make it fit within the confines of your campaign.

An idea can range from a simple image or concept to a full-blown story. It can center around a problem the heroes must solve, a foe they must confront, a new bit of technology they must find or retrieve, or an interesting location they must visit or explore. In a spontaneous adven-

ture, the idea should tie in to the trigger, but you won't build a solid plot around your idea (although you can jot down a few notes concerning possible developments along the way). Let the plot develop as the players' heroes interact with the story.

Background

Once you have an idea, you need to develop a background—the events that led up to the opening scene.

A background can be as simple or complex as you feel necessary. It can suggest the direction of the adventure or the way certain scenes play out. It also provides the story's driving force and impetus. In this way, the background leads to the trigger, just as the trigger leads to the adventure that follows. You can't control the story decisions of the players (and you really shouldn't try to), but you do have total control of the background. The more details you build into the background, the more you'll have to draw from as the adventure unfolds.

Supporting Cast

Any adventure you design needs to have a supporting cast of characters. At least one of these characters must have a connection to the background; the others can appear in the story as the adventure progresses. Villains, allies, opponents, experts, innocent bystanders, disinterested third parties, even crazed creatures terrifying the countryside can be supporting cast characters, depending on the scope of the adventure.

When you create a villain or some

other character you think will play a pivotal role in the adventure, design that character using the full character generation rules. Less important, or one-time-use characters (such as hired muscle or professional experts), need to be described only in terms of those statistics likely to come into play. For example, hired muscle needs statistics such as durability ratings, combat and defensive skill scores, and armor and weapon information. Experts just need skill scores related to their area of expertise. You can sum up many supporting cast members with a single descriptive sentence and possibly a single skill score. Of course, if the heroes decide to interact with a lesser character, you may have to make up details on the spot, but that's okay. Just build upon what you do know about the character and adjust to meet the current needs of the story.

Chapter 6: *Supporting Cast* contains information about assigning game statistics to minor and major supporting cast members. You can use the templates in that chapter to quickly generate certain types of premade characters for use in your adventures.

The Trigger

An idea, background, and supporting cast make up most of the foundation upon which an adventure is built. The only thing you're missing is the trigger—the ground-breaking moment that releases the adventure's potential and gets the story going.

Like other aspects of adventure

design, the trigger can consist of pages of detailed information or just a few simple notes. It depends on your basic adventure idea and the opening scene you envision.

No matter how simple or complicated a trigger is, it must accomplish some important goals: set the mood and tone of the adventure, get the heroes involved in action right away, establish a setting in which the action takes place, introduce a supporting cast that provides opposition to the heroes, and force the players to make a decision about what their heroes will do.

Mood and Tone

Based on the environment and the atmosphere in which it takes place, on the behavior of the supporting cast, and on the type of challenge it puts before the heroes, the trigger sets the mood and the tone of the adventure. An adventure intended to scare your players should have an atmosphere that projects a dark, deliberate mood, while an action-oriented adventure has a brisk, nonstop mood.

The trigger should also establish the tone of the adventure to come. A trigger with a light tone, populated by characters who snap off one-liners, is very different from a mysterious tone with characters using silence and strange actions to paint a nightmarish or surreal feeling.

The tone of the trigger can be dictated by the adventure itself or by the genre of the campaign setting. The space opera, science fantasy, grim reality, postapocalyptic, and technothriller genres have certain conventions and attitudes that make them different from one another. *Chapter 13: Campaign Design* outlines some of the more popular science fiction genres you might want to use for your campaign.

Regardless of genre, individual adventures can sometimes break the mold to tell a specific story. Just be sure you carry the tone throughout, both in your descriptions of settings and action, and in the way you have the supporting cast talk and act.

Heroes in Action

Roleplaying games are about dramatic tension: Something exciting should occur during play. Sure, there are slow times, periods where players can catch their breath, but you should never lose sight of the idea

The Beginning

An adventure can begin before the action starts, or when the action is already under way. For an adventure to begin before the action starts, all that's necessary is for the heroes to take the first step toward completing their goal. For example, an adventure could open with your players' heroes receiving a mission from the director of their organization. They would then spend the first part of the adventure investigating various leads to determine the best way to accomplish their goal. By their very nature, adventures that open before the action starts may take a little while to get up to speed, but that's okay. Like a roller coaster ride, this type of adventure starts with a slow, steady climb. Then it gets to the top of the incline, teeters for a moment, and drops with a gut-wrenching burst of speed.

An adventure that begins with an action-packed moment can get going in one of two ways. You can involve the heroes directly in the action, or you can include them as witnesses to events that occur to another cast member. Involving the heroes directly in the action is fairly simple. When the game session begins, simply inform your players of the tense situation. For example, you could open an adventure with the heroes hurtling out of a plane 27,000 feet above the ground. Sure, they'll want to know why they're in this situation, but you don't have to tell them right away; you can fill in the background as the adventure progresses.

Beginning an adventure with the heroes stumbling onto another cast member's problem also gets the story going quickly. For example, you could open an adventure by describing a woman who runs through a spaceport, clutching a package and throwing frightened glances at the six armed agents chasing her. She is obviously in the middle of her own story, and now it's up to the players to decide how their heroes will interact with that situation.

Opening an adventure in the middle of the action starts the story off with a bang, as the players must react quickly to the events playing out around their heroes—events that may involve life or death! This type of opening may spring from the continuation of a previous game session's cliffhanger or an event that occurred during an interlude.

that a roleplaying adventure is like a movie or a novel. Every event should advance the story in some manner, whether it's the adventure or the personal stories of the heroes. When the action looks like it's about to grind to a halt, it's up to the Gamemaster to keep it going.

The best way to keep the action moving is to prepare a good adventure trigger. Your trigger should literally burst with action. Remember, however, that action doesn't necessarily involve combat. It does involve conflict, though. Without conflict—a complication or challenge of some sort—you don't have action. Use the trigger to set up the initial conflict, then help guide your players as their heroes act and react to resolve the conflict.

Action in a challenge scene can be achieved by the heroes receiving an encoded message timed to self-destruct, or the arrival of a mortally wounded ally who has vital information for the heroes—provided they

can keep him alive long enough to hear his tale.

Action in a combat scene is pretty straightforward—the action is the combat itself. A trigger designed to provoke a combat scene could start with an ambush, a direct attack upon the heroes, or a brawl in a public place. A threat of violence is often as good as violence itself, since it provides a distinct possibility that combat will ensue. Bear in mind that the combat doesn't have to involve the heroes. They could start out as witnesses to an attack or to the threat of violence to another character.

Action in an encounter scene can involve the conducting of tense negotiations, or interacting with the denizens of an underworld hangout, trying to get information. Pure roleplaying, with dice rolls thrown in every so often to decide other characters' moods and attitudes, can be full of action—especially when the stakes are high.

Setting

Obviously, every part of an adventure takes place in a certain location. The setting of your trigger scene might help convey to your players the sort of adventure their heroes are getting into; a trigger that takes place in the middle of a riot on the street suggests a different sort of adventure from one that is set in a scientific laboratory. Note, however, that "suggests" is a key word in that last sentence—every scene in your adventure can have a different setting, and some of those settings might have nothing in common.

Supporting Cast

As discussed earlier, a supporting cast is an essential element of any adventure. The supporting cast in your trigger might be composed of minor characters that will never be encountered again in the adventure. You could use the trigger to introduce the adventure's major villain (who, of course, makes an escape so he or she can reappear later). In some kinds of challenge scenes, the supporting cast—whatever provides opposition for the heroes—might be an inanimate object (a door that must be unlocked) or a situation (a chasm that must be crossed). No trigger is complete without some sort of supporting cast, whatever form it takes.

What Will They Do?

Finally, all triggers must provide the players with choices: What will the heroes do in response to the situation they're confronted with? An adventure starts by presenting the heroes with something to do.

In general, "something to do" translates into story decisions. However you structure your trigger, the buildup should end with that most important question: What are your heroes going to do? How the players answer this question gets the game play under way.

After the Trigger

What happens after the trigger is entirely up to you and your players. You present the trigger scene, providing a conflict and something for the heroes to do; then you let the players roleplay. How their heroes react and the decisions they make should carry the adventure forward in true group storytelling style.

PLANNED ADVENTURES

A planned adventure is the traditional approach to roleplaying. Designing a planned adventure requires you to develop a full outline of the story you envision—though you still need to leave room for the players to perform. Remember, you set the events in motion, and your players determine the way events play out.

The first steps in designing a

planned adventure are covered in the "Spontaneous Adventures" section. You need a basic story idea, a background, a supporting cast, and a trigger to get the adventure rolling. But that's not everything a planned adventure contains. You also need to develop a plotline that describes the way the adventure will unfold.

Plotline

An adventure plotline has similarities to the plotline of any novel, mo-

Sample Adventure Design

- **Idea:** The heroes must carry the Orion Relic safely to Director Adam Stiles at the Academy of Science on Covalt IV.
- **Background:** The Orion Relic is an alien artifact uncovered from the asteroid belt designated as Orion Field 1278-C. It was discovered by an Academy team under the supervision of Dr. Laura Konn. Unfortunately, Dr. Konn's research vessel was attacked by Urzog pirates on its way to the Destrel Space Station. Although she was badly wounded, Dr. Konn managed to reach Destrel with her package. Now all she has to do is meet up with the security detail before the pirates catch her.
- **Supporting Cast:** Dr. Laura Konn; Urzog pirates; Captain Talon, the pirate leader; the mysterious Collector (who wants the relic and may make an appearance or two as the adventure unfolds).
- **The Trigger:** Read or paraphrase this opening scene to the players:

You and your companions arrived at the Destrel Space Station without incident. You've accepted an assignment to serve as security detail for a scientific expedition that's returning from the field, mostly because the money is good and you were heading to the Covalt system anyway.

You're supposed to meet up with a Dr. Laura Konn and her team of scholars, get them off this station, and deliver them to Director Adam Stiles at the Academy of Science on Covalt IV. It should be an easy way to make a cool \$50K.

You're watching the crowd when you notice a commotion near the northeast docking ring. The stunned mob parts to let a bruised and bleeding woman in an Academy jumpsuit pass through. She carries an object wrapped in stained carbonate cloth as she hobbles in your direction. Through the dust, blood, and grime, you think you recognize the woman from your employment orders—this could be Dr. Konn.

Before you can react, a gang of motley but well-armed spacers bursts from the crowd. One of the thugs pulls a pistol and shouts, "That's far enough! I want that object!" He fires a single shot, catching the woman in the back and driving her to the deck plating. The gang rushes toward her.

What are you going to do?

If this is a spontaneous adventure, your work is done. The next move is up to the players, as you've left them with a clear-cut story decision to make: help the woman, or leave her to the ruthless pirates. You can develop the rest as you and your players interact and play out the story. Do the heroes get involved? Is Dr. Konn alive? How do they get off the station? How do they shake the pirates? Does the mysterious Collector show up? Do the pirates work for him? These are just some of the questions that suggest themselves as this trigger scene runs its course.

If this is a planned adventure, then the trigger serves as the beginning of your adventure outline. You still have a few things you need to develop, like an act structure, various planned scenes, and a possible conclusion, as described later in this chapter.



Far from home

tion picture, or television episode. You're presenting the players with the initial idea and impetus of the tale, as well as the actions and reactions of the supporting cast and the environment of the setting. Your players provide the rest, as they use their heroes' actions to form an interactive tale—a group story.

A planned adventure isn't a rigid, linear story in which every event leads directly to another event. Although you can give your outline a linear structure for ease of use, let your players influence it through the actions of their heroes. Because of the nature of roleplaying—you usually can't predict what your players will decide to do next—your outline should be fluid and malleable. The

heroes should have the freedom to go their own way, approach every conflict as they see fit, and follow their own instincts. In this way, they help shape the unfolding plot.

Acts

Build your plotline in the classic act structure used in stage plays—this story form is a good model to follow in adventure design. Short, one-session adventures are played out in a single act. Extended, epic-length adventures, requiring several sessions of game play, consist of three acts.

The one-act adventure doesn't have a complex, multilayered plot. It is a straightforward tale, with a minimum of locations, twists, and supporting cast members. These are

adventures in which the heroes know exactly what they need to do, and they go out and do it. For example, the sample adventure design outlined on the previous page has the makings of a good one-session adventure. The heroes know they have to rescue Dr. Konn and return her and her relic to the Academy—it's just a matter of foiling the first group of pirates, getting transport, and avoiding the rest of the pirates during the journey to Covalt IV.

A three-act adventure can deal with more complex storylines, taking advantage of the larger scope of play. Think of the first act as the set-up, where you introduce the basics of the plot (establish a mystery, present a problem, etc.), provide a goal, and let the heroes interact with situations that lead them toward the second act. Act two features encounters and obstacles as the heroes try to resolve the situation, as well as a variety of complications before the heroes can achieve their goal. Act three presents the climax and resolution of the story, pulling all the threads together for the conclusion.

With some more planning, the sample adventure design on the previous page could be turned into a three-act story. The first act would involve dealing with the events that lead from the trigger scene; the second act takes place during the journey to Covalt; and the third act plays out on Covalt as the heroes meet their final challenge prior to delivering the artifact to its destination. The three-act structure opens the door to more story possibilities; the Collector and the pirate leader, Captain Talon, might not come on stage during a straightforward one-act adventure, but they might be pivotal characters in a longer and more complex plotline.

Scenes

Think of each act as a portion of the story that has its own beginning, middle, and end. The basic structure of an act contains three scenes, each of which can be either a challenge scene, a combat scene, or an encounter scene.

The beginning scene is the trigger that starts the action. The middle scene provides complications and obstacles. The final scene features the climax of the act, usually a minor resolution and a dramatic high note

◆ Example Alternates ◆

Using our sample trigger as an example, here are two possible alternate scenes you can plan for.

► **Alternate #1:** The heroes fail to act quickly enough to help Dr. Konn. The trigger ends with the pirates taking the package, running out, and leaving her lying wounded on the floor. Unless you have a plan to account for this turn of events, the adventure is over before it gets started. Your alternate plan could go something like this:

Later, the heroes receive a request to come to the station's hospital. Here, a badly hurt Dr. Konn chews them out for not helping her: "What kind of security detail did the Academy hire?" Then she orders the heroes to intercept the pirates and recover the relic. "You're still under Academy employ, and if you want your money you'll do as I say!" This takes the story in a different direction—the heroes are now the hunters instead of the hunted—but at least the basic idea of the adventure remains intact.

► **Alternate #2:** The pirates defeat the heroes. Whether this defeat occurs during the initial battle or at some point later in the adventure, you'll want to allow for the possibility that the pirates will win a battle somewhere along the way. Let's say you've decided that if the pirates win, they capture the heroes. This alternate scene should feature some information about the holding cells in the pirate ship, the number of guards, the location of the heroes' equipment, and the pirates' plans. Now you've got the makings of a great escape scene that you can use to resolve this detour in the story and get back to the main action.

that pushes the heroes to the next act. This can be any complication that makes the heroes (and their players) want to see what happens next. You can put the heroes in jeopardy, ending on a cliffhanger; or you can have the heroes learn a crucial or emotionally moving piece of information—a clue that gets them on the right track or sends them hurtling into the next scene.

Although an adventure can contain as many acts and scenes as you need to tell your story, the basic structure of a three-act adventure looks like this:

Act One

- Scene One: Trigger
- Scene Two: Complications
- Scene Three: Minor Resolution and Dramatic High Note

Act Two

- Scene One: Trigger
- Scene Two: Complications
- Scene Three: Minor Resolution and Dramatic High Note

Act Three

- Scene One: Trigger
- Scene Two: Complications
- Scene Three: Major Resolution and Climax

Elements of Scenes

To be sure that a scene contains all the necessary elements, just think of

it as an adventure in miniature and realize that each scene has all the same elements that an adventure has: action, mood, setting, supporting cast, and a goal.

The only one of these elements that wasn't discussed earlier, in the "Adventure Triggers" section, is the goal. When you design a scene, you should have in mind exactly what you want the heroes to accomplish before the scene ends. The goal of a challenge scene is to solve a problem, circumvent an obstacle, or in some other way overcome a challenge. In a combat scene, the goal is to win the battle, escape, or otherwise survive the scene relatively intact. In an encounter scene, the goal can be more subtle. It could involve gathering information, striking a bargain, making a purchase, tricking a guard, or just interacting with new characters.

How do you decide when a scene ends? Obviously, if the scene has a clear goal, then it ends when the heroes achieve the goal. However, you need to make allowances for the possibility that the heroes might fail, or that their players might make story decisions that send them off in a different direction. In these cases, you'll need to fashion alternate endings.

Alternates

Sometimes the heroes go off in a direction that doesn't follow the outline you've prepared. That's okay; spontaneity makes roleplaying games fun, exciting, and unpredictable. However, you can plan for some possible variations if your players stray. Plan for two or three alternate paths that you can eventually use to get back to the main story.

If the players go in a direction that takes them away from your original idea, that's okay. You may need to devise a follow-up scene quickly—but that's not as difficult as it may seem, as long as you have a strong sense of the story you're telling and what sorts of opportunities for action and challenges the story presents.

Scene Boosters

Finally, a full-length adventure may need a scene booster or two to help you keep it moving. Here are a few types of boosters you may want to plan on when designing a full-length adventure:

Floater

A floater isn't tied to a specific point in the plot. Instead, it's an event that you can insert whenever you want. The purpose of a floater is to make things interesting, to provide a bit of comic relief, or to spring a false clue or two on the players when they think they've solved the mystery of the day. Consider a floater as a short burst of action, a small rain cloud that drifts through the plot, waiting for you to unleash the brief shower within it.

Here's a floater that you can drop into the sample adventure trigger. As the heroes race toward Covalt IV, they suddenly pick up a distress signal. The ship's sensors indicate that, except for the heroes' ship, the craft being operated by the pursuing pirates, and the source of the distress call, no other vessels are in the immediate vicinity. The call comes from a damaged trader whose power plant has blown and whose life support systems are offline. The pirates get a chance to catch up if the heroes stop to help, but the heroes could gain a friend for life (or at least a merchant who owes them a favor). If the heroes ignore the distress call, the merchant makes note of their craft. When he's finally rescued, his goal shifts to finding the heroes and

making them pay for leaving him—they now have a new enemy who can pop up in future adventures, either as a floater again or as an integral part of the story.

Links

It's always good to build in a few links to the heroes. Early on in a campaign, you can key links to a character's roleplaying attributes—especially Motivation, perks, and flaws. Later, once you've gotten to know the heroes, you can create more personalized (and therefore more powerful) links to better tie characters and story together.

Links aren't scenes. They're subplots designed to fit into the existing story or to work as a parallel construction to the primary tale. Links can add new elements to the overall plot, or they can inspire improvisation and character development on the part of the players.

A Motivation link appeals to a hero's primary reason for adventuring, while a perk link or a flaw link provides opportunities for heroes to make use of these elements. For example, if a hero in the group is Dirt Poor, then you might add a link to take advantage of his flaw—such as a clue that waits in a formal restaurant. The Dirt Poor character will have a hard time making it past the posh restaurant's maitre d' to obtain that clue.

In the sample adventure described on page 211, the Collector is an obvious choice as the catalyst for a link. This mysterious figure can exploit the heroes' weaknesses in order to acquire the relic. Using a character's Code of Honor or Intamy against him, feeding an Obsession or Phobia, or taking advantage of a Primitive or Spineless character are all ways to use the Collector to manipulate link subplots.

Twists

Never tell the players or their heroes the complete truth—at least not until the final act of the adventure . . . and sometimes not even then. Save a few surprises to throw at them, or plan a few twists to use if they guess your original plot too quickly. This isn't cheating; it's a way to keep the interactive tale fresh for both you and the players. It's also a way to send the plot in a new direction when things begin to bog down.

Consider a twist as a lesser trig-

ger that you can use in the middle of an act or whenever you need to get the action moving again. Twists keep everyone alert and excited. Sometimes you can't plan twists; instead, you have to improvise them in response to the action. Just remember that twists make the unexpected occur, or the expected fail to occur.

Interludes and Transitions

Sometimes you need to collapse time before moving to the next scene or act. You can use interludes and transitions to accomplish this.

Interludes usually occur off-camera, with the players and the Gamemaster simply discussing what occurs during this "downtime." During interludes, characters can conduct research, train, improve skills, purchase equipment, rest, recover, or do whatever else is appropriate and allowable within the time frame. Plan for a few interludes in a full-length adventure. It's usually best to use them between acts, but whether that works depends on the demands and needs of the story.

Transitions can occur during play or between sessions—especially when the Gamemaster determines that nothing significant (such as skill improvement) can occur during this brief downtime. Sure, some transitions can last for a long time, but that time is almost always spent getting to the next scene or act. Think in terms of movies you've seen when you plan out transitions: whenever a scene ends, there's a fade out, and then a fade in. During the fade, the heroes have moved to the next location and time has advanced.

Props

Props are items you can use to make to bring the action to life. They include handouts, maps, illustrations or photographs, music and sound effects, and any other items you may need to add an extra dimension to the adventure.

Handouts

A handout is an object (typically a piece of paper or some other printed material) that you give to the players for them to examine and keep. It contains some information—which can be true, false, or some combination

of the two. A representation of a newspaper page or clipping, a scrawled note found at a murder site, a business card, and a computer screen full of data are examples of handouts. One of the best aspects of handouts is that your players can gain information without you having to read it to them; thus, they can stay in character.

Maps

Almost any adventure needs at least one map to depict the area in which the adventure unfolds and to keep track of the locations of all the heroes and supporting cast members as they move from place to place. Any single map is either a Gamemaster map or a player map.

Gamemaster maps are for your use only; they contain encounter locations and other important notes you require to run the game. You don't want the players to see this kind of map. You might need maps of the town, city, world, or other location where the adventure takes place. You also might want to have diagrams of ships or specific rooms where action will take place.

You don't have to map every possible location within the area of your adventure. For instance, if the story's only encounter scene takes place in a hardware shop, then you don't need to map the rest of the city block. You need maps for some challenge scenes and most combat scenes.

Player maps are used to show players what their heroes can see at a given moment, or they may be special kinds of handouts that the heroes generate—a computer diagram, blueprints, etc. Some are complete, and others are purposefully left unfinished for dramatic reasons. However, any map that the players can hold, examine, and point to greatly enhances the visual imaginings of a roleplaying session.

Illustrations

Nothing conveys mood and emotion like a good illustration or photograph of what the heroes see. You don't have to be an artist to prepare visual effects for your game session. Just find something close to what you're imagining in a book, magazine, or newspaper. Then make a copy and show it to the players at the appropriate moment.



A new initiate receives the blessing of her mentor

Music

Playing music in the background during a game session is a great way to set the mood of an adventure. Soundtracks from movies can convey horror, tension, or drama. Certain performers and types of music also work in this fashion, but usually to a lesser extent, as few groups put out one-theme albums or CDs.

Various collections of sound effects are available that you might want to use every now and again. Having a scream, creaking door, or other sound effect cued on your CD player can really get the players into the story—and probably make them jump, too!

Other Items

You can use just about anything as a prop in an adventure: exotic puzzles, cool toys, weird objects, whatever. Keep your eyes open; you just might see something that represents an alien artifact, a piece of evidence from a crime scene, or an ancient relic. If players can touch and examine these items, then they can better imagine the scene their heroes are in.

Don't go overboard with this kind of prop. Save it for the really special or unusual items, or for adventures where such props will really make the story come alive.

Ending an Adventure

There are only two guidelines you need to remember about the climax of an adventure. First, an adventure needs to end on a high note. Make the climax of the story full of action and give the heroes plenty to do. A climax has to live up to the scenes that come before it. Save the worst dangers, the most powerful villains, and the greatest secrets for the climax. Make the stakes high, and the payoff will be even higher—whether the heroes succeed or not.

Second, give the heroes plenty to do. Not only should they make story decisions and perform actions, but they also need to be the center of the story. The supporting cast should never show up the heroes, nor should other characters always rescue them. The adventure is about the heroes, so let them take center stage in

the climax (and through most of the rest of the adventure as well). If the major villain is too tough for them, let them figure that out and make their own decisions.

ADVENTURE HOOKS

Here are a few adventure hooks to get your imagination going. Though these story ideas encompass different time frames and SF subgenres, you can easily adapt any of them for the type of campaign you want to run. For example, if you change a haunted house into a derelict spaceship, and a deadly ghost into a murderous alien, you alter a traditional horror story into an SF horror story.

Hook #1: Hijacked!

In this modern-day to near-future technothriller, terrorists take control of a high-speed cross-country passenger train. To make matters worse, the President is aboard this train, in the middle of an old-fashioned tour

and media event that's scheduled to end on the coast with a meeting of world leaders. The heroes must find a way to take out the terrorists, save the President, and regain control of the train before it gets to the coast—where the terrorists plan to detonate a nuclear device in order to kill the gathered leaders and a large section of the population!

Background

A gang of terrorists supporting a fanatical cause has acquired a nuclear weapon. They could have purchased it from a chaotic, collapsing superpower, or perhaps they stole it from a military facility. They board the supertrain early, replacing key staff and setting the nuclear weapon in one of the cargo cars. If anyone tampers with the device, it will explode. As soon as they're ready, the terrorists subdue or kill most of the President's security team and lock away the rest of the passengers. When the adventure opens, the train is 18 hours away from its destination.

The terrorists, armed with an arsenal of conventional weapons, plan to vacate the train about two hours before it reaches its destination. Then they will board waiting vehicles and put as much distance as they can between themselves and ground zero.

The heroes are aboard the train when things get tough. They're either passengers or undercover security guards who went unnoticed by the terrorists.

Supporting Cast

You should sketch out some hostages in order to make the scene more realistic. Think about disaster movies that you've enjoyed, and use the characters you remember to populate your supporting cast. A mother and her children, a security guard, a conductor, elderly vacationers, the press secretary, and some young newlyweds are good choices. Add as many supporting cast members as you feel necessary to convey a sense of urgency to the heroes. Others can be detailed as the course of the adventure warrants.

You'll also need to sketch out the common terrorists, the lieutenants, and the terrorist leader. Make the leader and his lieutenants especially capable and memorable.

Trigger Scene

Read or paraphrase this trigger scene that ignites the action:

The dining car is packed tonight, full of passengers and members of the President's entourage—including Secret Service agents and other security types. You find a table and start to peruse the menu when the calm scene explodes into chaos. Waiters pull automatic weapons and surround the President. Shots ring out, and a few of the Secret Service agents go down. Others, you notice, appear to be sick or drugged. In just a few moments, the attackers neutralize the security detail and usher the President and a few of his staff out of the car. Passengers are whimpering or screaming, when more shots fill the air. The panicked crowd goes silent as a man with a machine gun steps atop a table. "We have taken control of this train. The President is our prisoner and the rest of you are hostages. Cooperate, and no more harm will befall you. Cause trouble, and you will die."

What do you do?

Hook #2: Installation 251

You can use this trigger in any setting, though it's presented here as a contemporary horror SF tale. Somewhere in the cold depths of the Alaskan wilderness, inside a secret government facility that doesn't officially exist, scientists are about to let loose a terror from beyond the stars. This creature is a killing machine, bred for battle and designed to hunt and kill with extreme skill. It even seems to enjoy the thrill of the hunt. If it escapes from the facility, humanity is doomed.

Background

The military recently captured a spacecraft of alien origin. The vessel, damaged on its trip to Earth, crashed in an isolated region, where heavily armed soldiers quickly quarantined it. The remains of the vessel and its wounded occupant were collected and transferred to a secret base in the Alaskan wilderness. Here, a team of scientists began an exhaustive program to learn as much as possible about the creature and its technology.

The alien, however, wasn't as badly injured as the scientists believed. It escaped from its cell and began systematically killing the scientists and the soldiers protecting them. Before it could leave the facility, however, one soldier was able to seal the base—trapping the alien and the survivors inside.

Time passed without word from the facility, and a storm is about to engulf the area. The heroes are sent to check on the base—though they aren't told anything about the work done there or the "guest" housed in its depths. That information is classified. The action starts as the heroes arrive at the facility.

Supporting Cast

This one's pretty simple. All you really need to do is detail the alien. Make it pretty powerful, since it should pose a significant threat to not only the heroes, but also the world at large. Maybe it's a self-replicating creature that's about to split in two. Or maybe it reproduces by planting eggs in host organisms (such as the base's scientists and soldiers). Or it may be reconstructing a deadly weapon from the remains of its spacecraft. Does it have any kind of code or conscience that the heroes would recognize, or are its motives totally alien and unfathomable?

You might also detail a few scientists or soldiers—members of the base's personnel who have managed to remain alive since the facility was sealed. These characters can serve as help for the heroes if necessary, or they can require the actions of the heroes to save them.

Trigger Scene

Read or paraphrase this opening to the players:

You arrive at the facility just ahead of the storm, though swirls of wind and snow already cloak the sky. The code given to you by the briefing team opens the base's doors; the space beyond is dark and foreboding. Red lights flash in dark recesses, indicating that the base was on alert when the facility shut down. You step past the thick emergency doors just as a computer voice announces, "This facility is under DefCon 4 quarantine. Outer emergency doors are being resealed." The huge metal doors begin to slide shut.

What do you do?

Hook #3: Murder on Asteroid 36

This adventure works best in a near-future PL 6 campaign, though you can use it in any setting with a Progress Level of 6 or higher.

A mining detail has uncovered an alien artifact on Asteroid 36. The artifact, however, isn't just a dormant chunk of ancient technology. It possesses a malevolent aura that can bend the wills of the weak-minded and turn others into psychopathic murderers.

Background

The Mars Stellar Resources Company has been mining asteroids for over a decade. Recently, a new mining base was set up on the large asteroid designated number 36. This hunk of rock and metal, about six kilometers across, is rich in precious ores. The base contains mining and ore-processing facilities. It houses a staff of 118 people, each of whom lives and works at the base for six months at a time.

Well into the second month of the current work shift, miners working in a crater at the far end of the asteroid broke into a huge cave. Within that cave, they discovered evidence of an ancient civilization. Among the ruins was an artifact, a monolith of great size, constructed of unknown materials. The cave was sealed off, and the base administrator sent a message to his superiors on Mars.

The heroes, in the employ of the Mars Stellar Resources Company, are sent to examine the artifact and secure it for further study. When they arrive, the base is in chaos. At least two miners have been savagely murdered, and everyone exhibits extreme fear and paranoia. Some claim they hear voices in the night; others report that strange beings have invaded the complex. Everyone is on edge, and the administrator seems like he's about to lose control.

In truth, the artifact is projecting images and emotions into the minds of the staff. Whether innocent in nature or truly evil, the alien images are driving the miners insane—and the longer the heroes remain in the presence of the artifact, the more crazed they will become. They must subdue the murderers before they can secure the artifact for further study.

Supporting Cast

You should detail the administrator and other base staff, including miners, crew chiefs, foremen, security, and geologists. None of them are completely sane (and a few are more crazy and homicidal than others). You might also need to add supporting cast members to the heroes' research team, especially if the heroes aren't experts in archaeology, geology, or other necessary sciences.

Trigger Scene

Read or paraphrase this opening scene to start the action:

The system liner drops your research launch on the asteroid's landing pad, then pulls away toward the safety of open space. An airlock extends from the mining base to provide an egress to the facility. The hatches cycle through, and you step into the base.

Three people approach you: a tall man you recognize as the facility administrator, a woman wearing a union foreman's insignia, and a man wearing a battle vest and a sidearm. All three look nervous and anxious. In the distance, you hear a pitiful scream, followed by insane laughter.

"The loonies are at it again," the man with the sidearm mutters, dropping his hand to his weapon.

The administrator throws him an angry glance, then turns toward you. "Thank heavens you've arrived," he says. "It's been a madhouse here, and I'm at my wit's end."

"That wasn't a long trip," the foreman snarls, her eyes darting back and forth between you and the two access corridors leading deeper into the base. "I say we just call for the liner and scrub this asteroid. It's jinxed or haunted—or both."

Suddenly, a man emerges from the corridor to the right. He's completely suited up, as though he plans to leave the base. "You won't kill me, too!" he shouts, reaching for the airlock controls. None of you are wearing protective clothing. If that hatch opens, you're doomed.

What do you do?

Hook #4: First Contact

This adventure is designed for an exploration or space opera campaign set at PL 7 or beyond. It involves the crew of an exploration vessel en-

countering a totally new alien species. Are these aliens friends or foes? Will the heroes make a good impression, or will they doom future negotiations by the decisions they make?

Background

The heroes' starship enters a new region of space and receives a communication signal of unknown and alien origin. They trace the signal to a ship that is at the farthest limit of their sensors. Moments later, a second ship, similar to the first, enters sensor range. It's on an intercept course for the first ship, which continues to broadcast its indecipherable message at the heroes' vessel. As the heroes analyze the sensor readings, the second ship fires a weapon that uses an unknown energy source at the first ship. The first ship spirals down to the fifth planet in an uncharted star system—a planet capable of supporting human life, but showing no signs of advanced civilization. The second ship follows it down. The commander of the exploration craft orders the heroes to investigate, stressing that they should evaluate the situation before getting involved in any conflicts.

Supporting Cast

In addition to any important supporting cast members of the ship's crew, you should define the aliens. Are the crews of both ships the same? Are there subtle differences the heroes might not readily see? Are the pursuers the bad guys, or are those being chased actually criminals? Once you decide these issues, the plot of the story will fall into place.

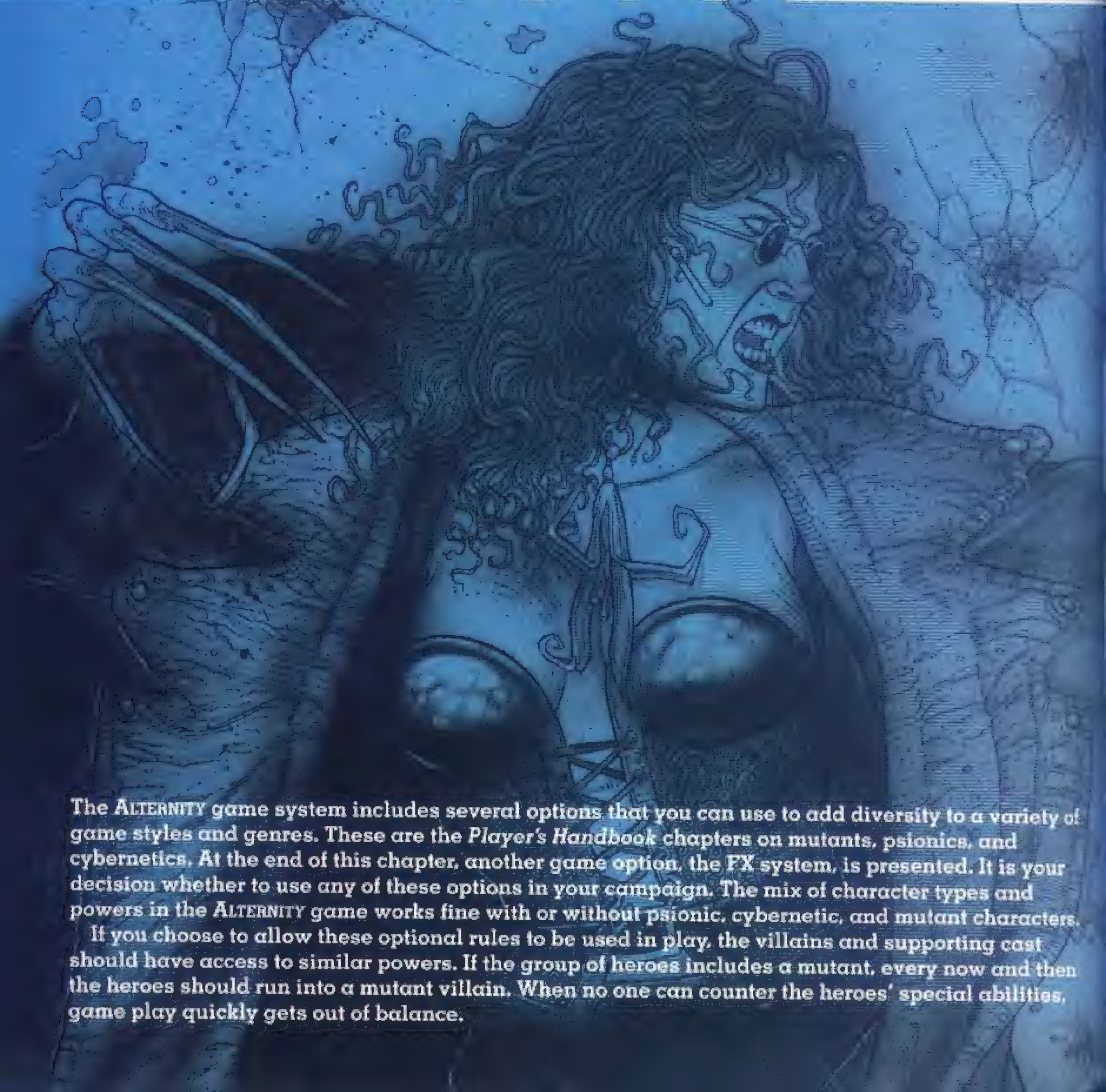
Trigger Scene

This adventure can begin in a few ways, depending on what you decide about the aliens' nature. Here's one scene you might use to get the adventure started:

Your scout ship enters orbit around the fifth planet and scans the surface. It doesn't take long to locate the alien ships: The first one has been severely damaged, but the other is intact. You start down, planning to land a short distance from their location so you can observe the aliens in action. Just then, your sensors pick up a massive energy surge—the crew from the second ship apparently plans on annihilating the first ship! What do you do?

CHAPTER 16

OPTIONAL RULES



The ALTERNITY game system includes several options that you can use to add diversity to a variety of game styles and genres. These are the *Player's Handbook* chapters on mutants, psionics, and cybernetics. At the end of this chapter, another game option, the FX system, is presented. It is your decision whether to use any of these options in your campaign. The mix of character types and powers in the ALTERNITY game works fine with or without psionic, cybernetic, and mutant characters.

If you choose to allow these optional rules to be used in play, the villains and supporting cast should have access to similar powers. If the group of heroes includes a mutant, every now and then the heroes should run into a mutant villain. When no one can counter the heroes' special abilities, game play quickly gets out of balance.

MUTANTS

Chapter 14: Mutants in the Player's Handbook describes a fantastic approach to science fiction mutations, although you could use the lower grades of mutations to represent genetically engineered heroes or heroes from worlds where the human race has been subtly changed. If you choose to play with this option, you should decide if the mutations were induced accidentally or deliberately. You will also need to decide if the mutant hero is unique or a member of a group that shares the same characteristics.

In the *Player's Handbook*, mutants represent a choice of species. Rather than choosing to play a member of an alien species, a player has the opportunity to roleplay a hero who's an altered human. The choice to play a mutant is not a choice of profession. There are mutant Diplomats, Combat Specs, Tech Ops, and Free

It's Your Game

The mutation system presented in the *Player's Handbook* does not allow for character who are members of an alien species to play mutants. There's no reason you can't choose to allow certain alien races to indulge in genetic experimentation or random mutagenics. The factor you'll want to be aware of is the possibility of a werewolf hero with a Strength score of 19, or a troll with an Intelligence score of 19.

Agents—possibly even mutant Mindwalkers.

One last thing to remember: If you or one of your players has a great idea for a new mutation power or even a different mutant drawback, use it! Most of the time, it's best if you keep your new powers reasonable. Balance in the game is important, but it's your campaign. If you want true superheroes, introduce a few incredible mutant powers and reduce the number of drawbacks.

Mutants in the Campaign

As you consider integrating mutants into your universe, look at these four alternatives. The first one is simple: Mutant heroes don't exist. Indeed, this may represent the most realistic choice. Mutations in this universe exist, but are usually harmful and often fatal. No mutation conveniently develops into an extraordinary, heroic power.

The second option is to rule that mutant powers are incredibly rare. Only a select few have access to them. These characters may be denizens of a single world, or produced by extremely expensive government and corporate experiments. Only those who meet very specific qualifications can be mutants. The few mutants who do exist are likely to be objects of scorn and scrutiny. Humanity, much like any animal species, doesn't enjoy competition with a superior.

The third option posits that mutants are simply uncommon. Most people know that mutants exist,

even if they don't have much personal experience with them. The social authorities have rules and means to accommodate mutants into the culture. Any player can create a mutant hero in this type of campaign as he or she desires.

The last option presents the extreme point that everyone is a mutant. Whether as the result of massive irradiation from nuclear fallout or the tinkering of mastermind aliens, humanity has changed. It's up to you to determine whether everyone has the same mutations, or if each individual has developed unique powers.

Incorporating Mutants

The decision whether or not to incorporate mutants in your campaign is completely up to you. If you're not certain that you want mutants in your game, try a few roleplaying sessions with one mutant hero. Use mutant villains and supporting cast sparingly. If, after a few adventures, the mutant rules are working for you, allow the presence of more mutants to creep into your campaign.

Accidental vs. Deliberate

The question of accidental versus deliberate mutations affects the level of genetic engineering and superhumans you want to see in your game. Accidental mutations can't be predicted or controlled; the hero or his ancestors underwent a genetic change because of exposure to radi-

ation or a mutagenic substance. An entire race of accidental mutants might be possible, if a colony is founded on a planet or in an environment with unusual and special properties. Depending on the nature of the mutation, members of this colony might be hated, feared, or pitied by the rest of the galaxy.

Deliberate mutations might represent attempts by a secret organization to breed supersoldiers or superagents. If the hero is no longer associated with the organization that funded the mutant metamorphosis, it may seek to capture its fugitive mutant. Such outlaws represent enormous investments at risk.

Sometimes, a group of people might be subjected to deliberate mutation for benign reasons. For instance, colonists who will be establishing a home on a high-gravity world might be augmented by superstrong bones, muscles, and vascular systems to resist the gravity, while colonists bound for an ocean world might be provided with gills and fins to better survive in their new home.

Individual vs. Community

Heroes who are unique mutants, either by accident of birth or by design, should be extremely unusual characters. They'll have capabilities that raise them head and shoulders above the general population. Allow your players to create mutant characters if you intend to play a super-heroic campaign or to put the heroes in extreme situations. In a

normal heroic campaign, mutant heroes should be permitted only if they are created with significant disadvantages.

Mutants who are members of a group of similar individuals should be treated much like a new character species. Like any nonhuman species, mutants should have both advantages and disadvantages. If heroes come from some particularly sturdy or dangerous stock, they may encounter villains with similar or even superior genetic enhancements.

Psionics

Many science fiction stories assume that a few special humans and alien species possess the ability to master mental powers. Today, we have only the most nebulous and imprecise understanding of what these powers may be . . . but in the future, people may be specially bred, engineered, trained, or cybernetically enhanced to control psychic energies.

Psionics in the Campaign

Four basic options exist for integrating mental powers into your campaign setting. The first one, and obviously the simplest, is to decide that they simply don't exist. Abilities such as ESP, clairvoyance, and telekinesis are hoaxes and trickery, and have no place in the light of science.

The second option is to rule that psionic powers are available only to a very limited or select group of characters. For example, there may be an extremely rare psi-gene that activates under certain conditions or only among a select few. A hero without this psi-gene could study the discipline for decades without becoming a Mindwalker. Maybe exposure to a certain planet's soil or radiation brings out psionic talent. Or perhaps an expensive alien technology catalyzes mental energies. Rare and unusual, these Mindwalkers might be ruthlessly sought out and exterminated as threats to society, or harnessed as invaluable espionage assets. The public may be unaware of or not believe in the existence of psionic powers. A hero with the Mindwalker profession is possible, but should be the rarest of characters. The most horrifying villain imaginable is the wild or rogue



Psi-detector

psi-talent who uses his powers against the unsuspecting and defenseless world around him.

If you want to allow Mindwalkers but keep them extremely rare individuals, you may use an Ability Score generation method that makes it difficult for players to predict or place scores. If a player is lucky enough to roll the prerequisites for the Mindwalker profession, he can choose that profession for his hero; but otherwise, he'll have to choose another profession. An interesting variation of this scenario is to bar the profession to human heroes, but to allow characters of certain alien species—Iraal, for instance—to choose Mindwalker as a profession.

The third option is to decide that psionic talents are uncommon, but not unheard of. The man on the street knows that intelligence agencies and law enforcement groups employ psions, and accepts this as a fact of life. A psion in this scenario may have to have special registrations, permits, or other legal limitations on his actions, but there is a societal infrastructure in place to handle people like her. A player can create a Mindwalker as desired in this type of campaign, since they're not that unusual.

The final option is radical, and will change the nature of your campaign. What if, someday in the future or on an alternate Earth, everyone possesses psionic powers? In this scenario, no one selects the Mindwalker profession; everyone, including the heroes, has free access to the Mindwalker broad and specialty skills in Chapter 14: Psionics in the *Player's Handbook*. Mindwalker skills in this case become Open skills, available to everyone.

Mental Attacks

You can choose to allow or disallow Mindwalkers as a profession; whatever your choice, unusual aliens may possess the power to make mental attacks.

The target of a mental attack uses his Will resistance modifier to provide a modifier to the attacker's skill check. In addition, ranks in Resolve—mental resolve can also apply penalties to the mental attacker.

Mental attacks are invisible and silent. No one other than the target can detect anything amiss.

Incorporating Mindwalkers

The decision whether or not to incorporate Mindwalkers in your campaign is completely up to you. If you're not certain that you want psionic characters running amok in your game, try a test run with only one Mindwalker hero in the party. Use psionic villains sparingly. If, after a few adventures, the psionics rules are working for your campaign, you can always expand the presence of Mindwalkers. On the other hand, if you don't like the capabilities of Mindwalker characters or the flavor they add to your game, you can gently retire the characters concerned and continue with your game.

Talents

Dealing with talents is probably a bit easier than dealing with full-fledged Mindwalkers in your campaign. Indeed, introducing a talent or two may be the best way to bring psionics into your campaign for the first time.

It's up to you whether talents exist in your campaign; you can decide that only talents exist, and that Mindwalkers don't. This type of campaign may present a human species just beginning its exploration of mental powers and energies. For the sake of simplicity, you could also make a choice to disallow talent characters while allowing Mindwalkers—either you've got the juice, or you don't.

CYBERTECH

The third major game option presented in the *Player's Handbook* features technologically enhanced characters. While powerful computers, robots, cyber-enhanced humans, and self-aware Grid programs are a part of many high-tech game settings, you have the option of ignoring them, leaving them as background elements of your campaign, or allowing heroes to make full use of these special capabilities by creating enhanced heroes.

Humans who have been enhanced by the surgical implantation of inorganic systems and structures into their bodies are cybernetic heroes. These systems range from pure physical enhancements such as dermal armor, reinforced skeletal struc-

ture, and concealed weaponry to neural computer nets that interface directly with the character's mind. Characters may make improvements on their basic human characteristics in order to add speed, reflexes, senses, memory, or intelligence.

Cybernetics in the Campaign

Like other "improved humans," cyborgs differ from the average man. They can do things that normal *Homo sapiens* can't. Fear and resentment are the likely result.

There are three ways to view cybernetics in your campaign: the technology doesn't exist; the technology exists but its use is morally questionable or requires an exorbitant amount of resources; or the technology exists and is widely available.

In a campaign using the first option, the technology of active cyberware—mechanical components activated by the user's thought or will—may never be developed. It might be possible to implant a laser pistol in a human hand, but firing it as an act of will may never be possible. If you don't want to deal with cybernetics in your campaign, you can decide that neural interface technology has yet to be invented. Or it might have been invented once and abandoned as too dangerous.

Even if the technology is available, people may have many reasons why they're reluctant to use it. If it costs six hundred million dollars (or even only six million dollars) to build bionic limbs, then very few people are going to be able to afford cybernetic enhancements.

The second option is that society considers tinkering with the human body to be morally reprehensible—cyborgs are frightening abominations of technology, and most people feel that they're just wrong. In this type of setting, a hero with cybernetic enhancements will be very rare—the Gamemaster might decide that obtaining cyberware implants requires an extraordinary effort or background, one with a terrible price tag attached. For instance, the hero might have to submit to implanted modules that allow a controlling organization to override free will and commandeer the hero for its own purposes. Cybernetic heroes may live completely outside human law,

embodying a threat that human authorities are legally bound to hunt down and destroy.

In the third option, heroes have access to cybernetic enhancements, and the technology is reasonably priced and accepted by the masses. Minor, stylistic, and fashion-conscious cybertech improvements are common. Pilots might be wired for reflexes, infantrymen protected by damage-resistant structures, and corporate executives implanted with databases for instant access. The mechalus represents the ultimate in this spectrum; all members of the species contain technology that augments their biological systems.

ARTIFICIAL INTELLIGENCE

Can computers become self-aware? If you assume that artificial intelligence is possible, a spectrum of supporting characters and heroes becomes possible. There are three general cases you should consider before you decide where artificial intelligence fits into your campaign: it's impossible, it's possible at high cost, or it's possible without extraordinary effort.

If artificial intelligence is impossible, you won't have to worry about sentient computers in your campaign. Any computer equipment the heroes use resembles the machines of the 20th century. The technology may be faster and more capable. Slow as they are in electronic terms, humans may limit the potential capability of future computers.

The second possibility is that artificial intelligence is possible, but impractical for all but a few specialized uses. Perhaps the only way to make a self-aware computer is to use a large amount of living neural tissue suspended in a bulky and expensive life-support system. Or, maybe artificial intelligences have to learn how to think cognitively, like humans. Once the machine is built, it may take years to achieve sentience. Or artificial intelligences may be too advanced, unstable, or inhuman for comfort. They're dangerous or unreliable, subject to psychoses, mood swings, or megalomania. The upshot of this option is that artificial intelligences are built for special purposes and carefully controlled by human supervision. Heroes only interact

with mechanical intelligences in rare or unusual adventures.

Finally, if artificial intelligences are relatively common, everyone has access to computers or machines with decision-making abilities. What does this mean for your campaign? It means that the heroes have equipment that may be smarter than they are. Imagine that the ship's computer is perfectly capable of minding the store while the heroes are out exploring the planet. Such a computer may monitor their progress, offer suggestions, and even fire up the engines and fly to the rescue if the heroes get into trouble. It might even be possible to allow one of the players to run the ship's computer as a member of the group of heroes.

Common AIs provide a safety net for the heroes. Instead of learning a whole battery of highly technical skills, they can buy advanced computers and software for the tasks they need to accomplish. If there isn't a doctor in the party, a portable computer with medical diagnosis software and a hero who knows how to



Crystal lattice circuitry

switch it on can serve as a substitute for a trained medic.

In a society where artificial intelligences are common, one crucial issue might arise: How does the law recognize, protect, or regulate intelligent machines? Maybe AIs come with a kill switch to terminate them if they get out of control . . . or a pain/pleasure switch to ensure complete obedience. What's the morality at stake here? If a hero shoots a

desktop computer with an AI program, is he guilty of murder, or destruction of property? Do AIs have the right to quit if they don't like their employers? The way in which AIs are regarded by society might have a significant influence on the technology and social structure of the campaign. It might also tell you a lot about the benevolence of the society.

Robots and Androids

If artificial intelligence is possible in compact form, a self-aware machine with locomotive and manipulative powers might be built. In a society in which AIs are rare, expensive, or regulated in some fashion, thinking robots will be extremely unusual—it would be much easier for an immobile AI to control remotely operated robot vehicles than it would be to mount the AI computer brain in a mobile chassis.

It's worth noting that a robot is not necessarily a self-aware machine that acts like a human in a metal suit. Robots take many forms; the advanced manufacturing machines in use today are robots, as are many space probes, remote-piloted vehicles, and similar devices. In the future, robot technology may embrace anything from automated terraforming or mining machines to nanotech surgical devices that repair the human body from the inside out. In most science fiction campaigns, single-task robots like these will be as common as screwdrivers; people will think nothing of passing auto-harvesters in the fields, or dispatching mail and messages on programmed couriers.

On the other hand, intelligent robots will be uncommon but not extraordinary in societies where AI is a commonplace tool. All the considerations mentioned in the preceding discussion still apply—are robots citizens, and if not, what exactly is their status? Robots are likely to be far better than humans at many tasks, but completely unsuitable for others. Robot surgeons make sense—but robot doctors or psychologists don't, since they may not be able to truly appreciate the mental or spiritual sides of the human condition. Typically, robots will be reserved for use in jobs that humans would find difficult, boring, dangerous, or dis-

AI Characters

How does an AI view its place in the universe? Because it probably involves high-tech computer components, the AI is instantly and flawlessly able to perform mathematical calculations, monitor any machine or sensor it's connected to, or access any piece of data in its memory. The AI is not omniscient, but routine questions about math, science, history, geography, or any of the basics of human science can probably be answered in a nanosecond of access time. A true AI might even be able to guess at conclusions when it doesn't have all the facts.

It's up to you whether AIs lack personality or have been invested with all of humanity's quirks. People like working with people, so it's reasonable that an AI architect will program in the basics of a human personality. The computer might be wry, sarcastic, long-winded, or inquisitive.

If true personality emulation is impossible, the architect might create the facade of a personality, building a machine that's programmed to mimic the nuances of human behavior without understanding that it is doing so. Every now and then, the computer might hit a jarring note as it misreads a conversation, fails to detect facetiousness or sarcasm, or displays a total blank spot in its understanding of emotion or interpersonal relationships. Maybe the AI has the same personality flaws as its creator. Finally, the AI might have a completely inhuman personality. It could be coldly mechanical, ruthless, or fettered by command structures.

What are the limits of the AI character? Obviously, the value of its conclusions depends on the quality of the data it works with. If a sensor is miscalibrated, the computer derives erroneous conclusions. This is better known as the "garbage in, garbage out" phenomenon. And, just as with a real person, the AI may have gaps in its knowledge. If the programmers didn't think that the computer needed to know anything about theater, the AI will have no idea who Edward Albee, Tennessee Williams, or William Shakespeare are. Until the machine builds up its experience through time and interaction with humans, its knowledge of various topics will be an all-or-nothing affair.

tasteful, and intelligent robots used only for the most challenging of these.

Androids are a different matter. For our purposes, we'll assume that an android is defined as a robot of human appearance. Even if AI is so advanced that a complete personality can be packed into a man-sized frame, the engineering difficulties of creating something that moves and acts like a human will be enormous. While the human form is useful for humans, it's not the ideal shape for a variety of tasks, such as heavy excavation, flying, or fighting. Intelligent robots designed for these specialty tasks are more likely to be clearly mechanical in nature, with a body shape and external covering suitable for their work. In short, there has to be a good reason to build a mechanical being in the shape of a human.

The same considerations for any artificial being apply to androids . . . but androids raise the specter of replacement. If a robot is clearly a mechanical being, everyone knows that there are laws and standards that apply just to artificials. But an android who can pass for human represents a threat to the entire species, especially if it is generally superior to humans. It's not unreasonable for future AI engineers to deliberately avoid the human form, in order to reassure the public that their creations know their place in the cosmos. On the other hand, robots might be deliberately built in android form to avoid having them look mechanical and inhuman . . . it's all a matter of how society perceives the artificial being.

All that said, androids can make for very interesting characters in a game, either as villains or as heroes. Even if androids are reviled by the public and strictly prohibited by law, many governments and corporations won't be able to resist the temptation to build superagents who can be programmed for complete loyalty, utter ruthlessness, and photographic memory. Since androids represent some expenditure of resources, time, and money, no one will build one and then just set it free—they'll build the android for a specific purpose or for commercial gain.

FX

An optional rule you might want to consider for your campaign is "FX." Short for "special effects," FX refers to any ability or power a character possesses that's beyond the norm. Magic, miracles, enchanted items, superscience gizmos, and comic-book superpowers are encompassed by the FX system. As such, most campaigns should use these rules sparingly, if at all. They're appropriate for some types of campaigns, but can quickly ruin the flavor of a more traditional science fiction setting.

You can modify this system as you see fit for your campaign. In some campaigns, heroes have no more than one FX to call upon, and some characters have no access to FX at all. In other campaigns, every character has one or more FX abilities. It all depends on the type of stories you want to tell.

Deciding on FX

You have to consider if the special abilities and powers you want in your campaign can better be handled by one of the other existing game mechanics. In some cases, you aren't really looking for an FX, you simply need to add a new skill to the skill list. In other cases, the FX you or your players have in mind might better fall under mutations or psionics, or it might simply require the invention of a new bit of cybertech.

Some FX are decidedly special. They allow a character to alter the world around him in strange, unusual, and often powerful ways. When you've decided that FX is the way to go to handle a specific effect, the rules presented below will help you regulate that effect in a fair and consistent manner.

FX Skills

All FX fall under one of the three broad skills. When creating an FX, the first step is to decide which of the broad skills best defines the effect in general terms. The three FX broad skills are Arcane Magic, Faith, and Super Power.

FX specialty skills, on the other hand, aren't completely mapped out for you like other specialty skills in the *ALTERNITY* game. Guidelines over the next few pages give you a good start, providing suggestions and some examples. For the most part, you and your players are on your own. You have to decide the extent of any FX and the cost associated with it. "Purchasing FX Skills," later in this chapter, tells you how to do this.

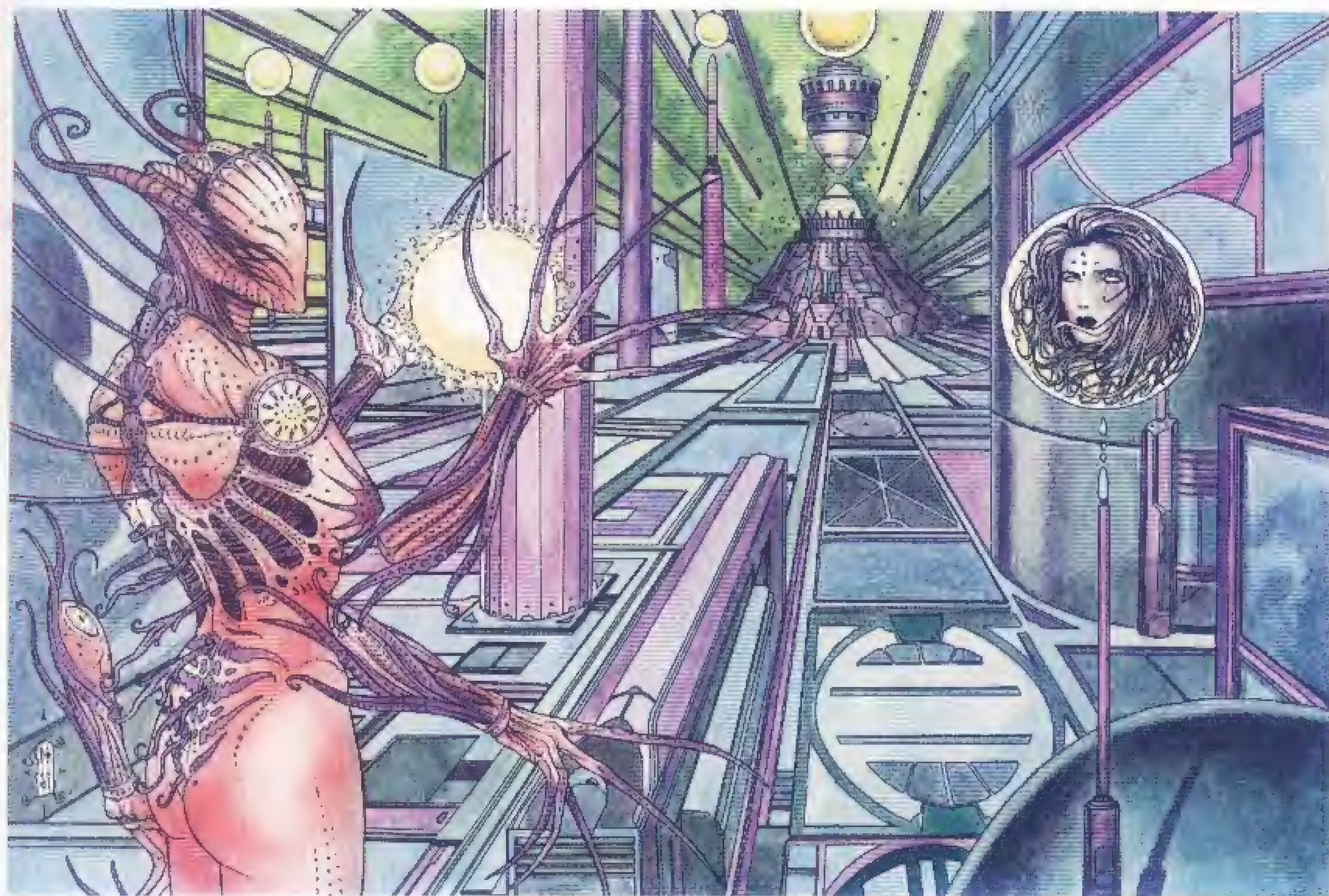
Arcane Magic FX

Wizardry and sorcery fit in most fantasy roleplaying games, and you might want to make them available for use in this game as well. Arcane Magic is a fantastic effect produced through the use of ritual, word, or will, or a combination of these three

Why Use the FX System?

Some Gamemasters and players will want to create campaigns and heroes capable of performing actions that aren't covered elsewhere in the core *ALTERNITY* game. For example, you might want to create a campaign where aboriginal aesheyian shamans and weren monks can actually call upon the spiritual magic of their faith, or you might want a form of sorcery available to the heroes and villains of your space opera setting. You might even decide to create a campaign similar to the worlds you've read about in comic books, allowing your heroes to select phenomenal superpowers to complement their other skills and abilities. Any or all of these options—or anything else you can imagine—can be handled by FX.

This system can also be used to create unique aliens and villains with strange powers. Most of the information to follow assumes that heroes are the ones equipped with FX. But it's certainly within your power to prohibit players from using FX and still use the system to provide new twists to your supporting cast. Imagine the possibilities of an evil alien creature with the Super Power FX skill or a primitive shaman capable of giving the futuristic heroes a run for their money thanks to his Faith FX skill.



Celestial communication

components. Spells and incantations are the stuff of Arcane Magic, as are many occult-oriented FX, such as transforming into an animal or animal-human hybrid. Consider Arcane Magic to be the science of the unknown, ancient lore that employs enchantment the way modern scholars use the scientific method.

Arcane Magic often requires a repeated ceremony or gesture ("the ritual"), an incantation or spell ("the word"), and the spellcaster's own inner strength, concentration, and desire ("the will") to produce a magical FX. Sometimes it may require specific components that are used up during the ritual, or a focus of some sort, such as an amulet, talisman, or wand.

Once a character possesses this FX broad skill, the types of specialty skills that can be added are nearly limitless. Each specialty (in effect, each spell or spell-like FX) must be purchased separately, as detailed below.

Using this system, an Arcane Magic user will never match the power and versatility of a traditional fantasy spellcaster. The FX system

allows Arcane Magic of a limited and more manageable type to be included in a campaign. Of course, since magic is only an object of myth and bedtime stories in most modern and futuristic societies, even the smallest bit of real magic can be stunningly powerful.

Arcane Magic Specialties

Arcane Magic manifests as a spell that can be cast to produce a specific effect. Each Arcane Magic specialty skill is in fact a single spell, such as *blast of fire*, *arcane shield*, and *wolf-form*.

Spells fall into these general categories: *augur*, *conjure*, *summon*, and *transform*.

► **Augur** spells are designed to uncover secrets, predict the future, or glean information through supernatural means. Examples include reading tea leaves, casting runestones, calling forth images in mirrors or crystals, using a divining rod, reading cards, using a lodestone, or even consulting supernatural beings.

► **Conjure** spells are magical effects that create something from

nothing. Such a magical creation doesn't last long, and it can be as insubstantial as an illusion or as real as a burst of flame. These magical effects can be designed to deceive another's senses, causing others to see or hear things that aren't there; or they can be more substantial, actually calling matter into being for a limited time. Examples include all kinds of illusions; spontaneous natural effects such as balls of fire, bolts of lightning, or a cloud of acid rain; small physical items of minor consequence such as tools, coins, or toys; small physical items of major consequence such as precious metals, jewels, or hand-held weapons; and large physical items such as vehicles and shelters. Conjure spells are also used to create shields of magical energy, auras of magical protection, and wards of all types.

► **Summon** spells involve magical movement—opening dimensional doors or otherworldly portals to traverse the space between here and there, transporting by will and spell alone, summoning an otherworldly creature through the flux of time and space, and otherwise moving the

spellcaster, people, and things by arcane means.

► **Transform** spells allow casters to change the nature of objects, people, or themselves. Examples of transform spells include changing one material into another (such as coal to diamond), transforming a foe into a frog, turning oneself into an animal, altering oneself into an animal hybrid (such as taking on the form of a werewolf or other supernatural creature), and bestowing enchantments on mundane objects.

Faith FX

Miracles and divine intervention all fall under the heading of Faith FX. If you want primitive shamans, exotic clerics, and holy men of all beliefs to receive power based on their belief, then you might want to make this FX available in your ALTERNITY game. Through prayer, divine contact, communal belief, and holy ritual, miracles can be accomplished.

While Faith FX has its share of ceremony and ritual, it also has an additional element not found in Arcane Magic. Faith requires not only unyielding belief, but an agency outside the caster to serve as a source for the FX. This outside agency can be a god, spirit, divine being, conscious force, or even the collective faith of a community of believers that gives a holy man his spiritual power. Sometimes a holy item or relic is required, and other components may be needed for the ritual portion of the miraculous request.

After a character possesses this FX broad skill, he must purchase one of these specialties: *Ordinary miracles*, *Good miracles*, or *Amazing miracles*. This determines the quality of miracles that a higher power can direct through the character with Faith.

Using this system, an ALTERNITY game priest or shaman will not be able to match the power and versatility of a traditional miracle-worker in a fantasy setting. The FX system allows miracles of a limited nature to be part of an ALTERNITY campaign.

Faith Specialties

Faith manifests as miracles that produce specific effects. Each Faith specialty skill description provides general guidelines under which a character can pray for specific aid or effect.

**TABLE G69:
FX BROAD SKILL
COSTS**

FX Broad Skill	Cost
Arcane Magic	15
Faith	18
Super Power	12

Unlike with Arcane Magic, there are no specific spells associated with spiritual magic. Instead, a miracle-worker chooses a general level of power. The effect sought after can never be more powerful than the quality of the Faith FX specialty skill chosen by the character.

► **Ordinary** miracles can be performed by any character with the Faith FX broad skill. They provide minor bonuses or penalties (–1 or +1 step); heal small amounts of stun, wound, or fatigue damage; provide very limited, very general information; or give some other minor benefit for a short duration.

► **Good** miracles provide medium bonuses or penalties (–2 or +2 steps); heal medium amounts of stun, wound, or fatigue damage; heal no more than 1 point of mortal damage; provide specific information; or give some other medium benefit for a short duration.

► **Amazing** miracles provide major bonuses or penalties (–3 or +3 steps); heal large amounts of stun, wound, or fatigue damage; heal mortal damage; provide expert information; or give some other significant benefit for a short duration.

Super Power FX

Fantastic prowess, superscience gadgets, magical items, arcane relics, and abilities like those of comic book characters are handled by the Super Power FX. If you want superheroes, supervillains, or magic-

like technology in your campaign, then use the Super Power FX in your ALTERNITY game. A Super Power FX can be the result of a fantastic mutation, a research project, arcane lore, mythology come true, alien technology, or even alien intervention.

Some Super Power FX might require a ritual or relic to use, but most tend to be part of a character's natural makeup. Once a character is imbued with a Super Power FX, it's hers to use—at least until the FX energy runs out (see "FX Energy" below).

Once a character possesses this FX broad skill, the types of specialty skills that she can add are nearly limitless. Each specialty Super Power FX must be purchased separately, as detailed below.

Super Power Specialties

Super Power FX manifests as powers or abilities beyond the scope of nature, or as magical or supertechnological items of great power. Each Super Power specialty skill is a specific ability or item. Every Super Power specialty is in one of these categories: *enchanted relic*, *extreme ability*, or *overscience gadget*.

► **Enchanted relic** includes mystical, magical, and mythological items of power that fall into a character's possession. King Arthur's sword Excalibur, Thor's hammer, the Holy Grail, an enchanted cloak of invisibility or flight, Hercules' belt of strength, Roland's horn, and the Golden Fleece are all examples of enchanted relics.

► **Extreme ability** handles FX that are part of a character's natural makeup, though there doesn't have to be anything natural about the power's origin. Flying, firing bolts of energy, turning into fire or water, becoming invisible or intangible, sticking to walls, and manipulating gravity are all examples of extreme abilities. Each extreme ability is a separate specialty skill.

**TABLE G70:
FAITH FX SPECIALTY SKILL COSTS**

Faith FX Specialty Skill	Cost
Ordinary-quality miracles	5
Good-quality miracles	10
Amazing-quality miracles	15

TABLE G71: ARCANES MAGIC & SUPER POWER FX SPECIALTY SKILL COSTS

FX Specialty Skill	Cost
Ability Score boost (+1/+3/+5)	5/10/15
Bonus steps (-1/-2/-3)	3/5/7
Penalty steps (+1/+2/+3)	3/5/7
Bonus to damage (1/2/3 points)	2/4/6
Bonus to combat movement	5/10/15
Fatigue damage (1-4 points)	8
Stun damage (1-5 points)	1
Stun damage (6-10 points)	2
Stun damage (11-15 points)	4
Wound damage (1-5 points)	2
Wound damage (6-10 points)	4
Wound damage (11-15 points)	6
Mortal damage (1-2 points)	8
Mortal damage (3-5 points)	10
Damage type (O/G/A)	0/3/6
Low impact (LI) attack	1
High impact (HI) attack	2
Energy (En) attack	3
Duration, instant	0
Duration (1/2/3 time units)	2/4/6
Flight or other special movement	6
Knowledge	3/6/9
Range, personal	0
Range, 2/4/6 meters	2
Range, 10/20/30 meters	4
Range, 100/200/300 meters	6
Range, 1/2/3 kilometers	8
Travel (1 km/10 km/100 km)	4/8/12

► **Overscience gadget** covers a variety of fantastic inventions, alien technologies, and far-future gizmos that surpass even the best technology of the era. Flight rings, super force-field belts, advanced suits of "smart" attack armor, shields crafted from indestructible meteorites, web-shooting wrist bands, utility belts full of high-tech gadgets, ray-beam gauntlets, and alien weapons of extreme destruction are all examples of overscience gadgets. Also, look to *Chapter 12: Alien Artifacts* for additional ideas for creating overscience gadgets.

Purchasing FX Skills

If FX are used in your campaign, then characters have the option to purchase an FX broad skill. A hero

can never have more than one of the FX broad skills.

After selecting an FX broad skill, the hero must purchase associated specialty skills separately. Purchasing a broad skill *provides no benefit* other than qualifying the character to buy specialty skills. The standard costs for the broad skills are shown on *TABLE G69: FX BROAD SKILL COSTS*. As always, the Gamemaster is free to modify the costs listed to fit the particulars of his or her campaign.

FX specialty skills are purchased much like any other specialty skills, though the cost is based on the quality of a particular skill's effect.

For Faith FX specialty skills, this is shown on *TABLE G70: FAITH FX SPECIALTY SKILL COSTS*. The cost of each Faith FX specialty skill is fixed, and isn't computed like the other FX specialty skills.

For Arcane Magic and Super

Power FX specialty skills, use *TABLE G71: ARCANES MAGIC & SUPER POWER FX SPECIALTY SKILL COSTS*. Add up the varying effects you've built into an FX to get a base cost for the skill.

FX specialty skills with a total base cost of 5 points or less are considered to be of Ordinary quality; a total base cost of 6-10 points indicates Good quality; and a total base cost of 11-15 points is Amazing quality. No FX specialty skill can have a base cost of more than 15 points.

The quality of a specialty skill determines its cost in FX energy to use (see "FX Energy" below).

Improving the rank of an FX specialty skill is done the same as for other specialty skills. The skill point cost is equal to the current rank added to the base skill cost.

Designing FX Specialties

Much of the material to follow is subjective; you must weigh design parameters and make decisions on FX that could fall one way or the other. It's usually better to lean toward the more expensive costs when an FX skill cost is in doubt.

Step 1: Describe the FX

Write a paragraph that describes the FX specialty. Does the FX specialty cause damage? Protect from damage? Does it allow flight? Time travel? What exactly do you want the spell, gadget, or superpower to be able to accomplish?

The first step in designing the specialty skill is to consider which Ability the FX is associated with (Strength, Dexterity, Constitution, Intelligence, Will, or Personality). The Ability Score becomes the base score needed to successfully use the FX, but make sure you have a logical connection to the Ability you've selected. In other words, don't arbitrarily connect an FX to a high Ability Score. (For Faith FX, Will is always used as the relevant Ability.)

Step 2: Determine the Quality

Every FX specialty skill is rated as Ordinary, Good, or Amazing. You've determined what you want the specialty skill to accomplish; now you have to consult *Table G70* or *Table G71*. If you're using *Table G71*, add



Two victims of cykosis

up the cost of each of its characteristics to get the total base cost. This number is the cost for a hero to purchase the specialty skill at rank 1.

Remember, the total base cost also determines the specialty skill's quality, as noted above. No specialty skill can have a total base cost of more than 15 skill points.

Be wary of designing a specialty skill that has a permanent effect or an especially long duration. With the exceptions of miracles and magics that actually change the nature of substances (making water into wine, multiplying food stores, etc.), FX of a permanent nature should be rare.

Step 3: Add FX Trappings

Trappings make an FX come alive by providing visual cues and roleplaying hooks that can be used in a gaming session. Some trappings are just for color, and that's okay. Others can reduce the cost required to purchase and improve a particular FX.

► **Arcane Magic trappings** add flavor to spellcasting. All arcane spells require some combination of ritual, word, and will to bring the ef-

fect into the natural world.

Ritual includes all preparations necessary to cast a spell, including making gestures, reading spellbooks, or imagining arcane formulas in the mind. If a ritual is a simple action (can be performed in one phase as part of a single skill check), it provides no reduction to the cost of a spell. The ritual is simply a part of the specialty skill's flavor.

If the ritual uses a complex skill check, requiring a number of successes based on the quality of the spell to cast (see "Complex Skill Checks" in Chapter 3: Gamemasters in Action), then the total base cost of the spell is reduced by 1, 2, or 3 points. (The complex skill check must be of Ordinary complexity in order to qualify for the 1-point reduction.)

◆ **Example:** Wolfgang designs a spell of Amazing quality with a total base cost of 14. He decides to attach ritual trappings to the spell, reducing its cost from 14 to 11 skill points. Now the specialty skill is cheaper, but it must be performed as a complex skill check of Amazing complexity, requiring 8 to 10 successes to complete.

Word and *will* are tied together and must always be part of the arcane ceremony. Word is the actual vocalization of the magical phrase required to activate the FX, while will provides the energy necessary to alter the natural world in some way. Neither of these can be altered, so have no effect on cost.

In addition, an Arcane Magic FX specialty skill can have two other trappings: component and focus.

Component indicates that a particular spell requires an ingredient to cast. A component should be tied to its spell in some way and not be a common object. For example, a spell that permits flight should require the feather of an uncommon hawk rather than one from an everyday pigeon. A character should keep track of the available stock of components, as each use of the spell diminishes this supply. Spells with components have a base cost reduction of 1 point.

Focus provides another limiting factor on how and when FX can be activated. Typical foci include staves, wands, crystals, amulets, talismans, spell books, cats and other animal pets, or even another sen-

tient creature. Without a focus, the spell can't be activated. A spell that features this trapping has a 1-point reduction to its cost.

► **Faith trappings** are represented by a relic that serves as a symbol of belief and a conduit of spiritual power. Without such a focus, the caster suffers a penalty based on the quality of the miracle being prayed for (+1/+2/+3). For example, attempting a Good miracle without trappings imposes a +2 penalty on the Faith FX specialty skill check. The ritual for a miracle is the prayer itself, which is simple in nature. There are no cost reductions for Faith trappings.

► **Super Power trappings** vary wildly, but may reduce a skill's base cost in some cases. Common cost reducers include a power limitation, a trigger, or a component needed to make a super-science gadget operate. Any of these trappings can provide a cost reduction of 1 point.

Limitations are common items that hinder the onset of certain FX. Such an item can add penalties to an FX skill check or prohibit the use of the FX in its presence. Optionally, the item may weaken the character directly; for example, it may reduce an Ability Score for a period of time or cause fatigue or stun damage. Common limitations include specific minerals, frequencies of light or sound, colors, chemical mixtures, water, or specific creatures or plants.

Triggers are conditions that must be met for certain FX skills to be used. For example, a certain skill might only be usable at night, underground, or in the presence of the family pet.

Components are precious minerals such as silver or gold, special serums and compounds that take time and resources to prepare, or specific energy sources of limited availability.

Step 4: Record Information

Record the pertinent information regarding the FX: the FX skills, the hero's, villain's, or alien's FX energy total, and the game effects if the FX skill check succeeds.

FX Energy

How often you allow characters to demonstrate incredible FX powers depends on the tone of your campaign. Refer to TABLE G72: FX ENERGY.

TABLE G72: FX ENERGY

Campaign	Starting	Max	Cost
Realistic	5	10	20
Heroic	10	20	10
Super Heroic	15	30	5

Starting gives the amount of FX energy that a starting character with FX powers begins with. Later in their careers, characters can increase the amount of FX energy they possess.

Max gives the most FX energy a character can ever have.

Cost gives the skill points needed to purchase an extra point of energy to add to the character's permanent reservoir. For example, a character in a realistic campaign must spend 20 skill points to increase his or her FX energy total from 5 to 6.

Using FX

Most FX work just like other skills in the game. A player can decide that his hero is going to use an FX skill in place of any other action. An FX skill score is equal to the associated Ability Score plus the number of ranks the character possesses. An FX skill check has a base situation die of +d0.

TABLE G73:
FX ENERGY COSTS

Arcane Magic	
Critical Failure	4
Failure	3
Ordinary spell	1
Good spell	2
Amazing spell	3
Faith	
Critical Failure	5
Failure	2
Ordinary miracle	2
Good miracle	4
Amazing miracle	6
Super Power	
Critical Failure	3
Failure	2
Ordinary power	1
Good power	1
Amazing power	1

Each attempted use of an FX specialty skill consumes a number of FX energy points, depending on the quality of the FX specialty skill and whether or not the attempt succeeds. Refer to TABLE G73: FX ENERGY COSTS. Once a character's FX energy falls to 0, no more FX uses can be attempted until the energy is replenished.

If a character's FX energy falls below 0, he suffers fatigue damage. For each FX energy point that isn't available to spend, the character suffers 1 point of fatigue damage. Of course, a character has to have at least 1 point of FX energy to even make an attempt to use an FX skill.

Resisting FX

If an FX is directed at another character, the target may have defenses to use against it. Resistance modifiers may apply penalties (or a bonus), as with any other skill use. It all depends on the nature of the FX. Some direct-attack FX forms (Arcane Magic or Super Power skills) can be resisted by either Strength or Dexterity resistance modifiers. FX forms that target other aspects of a character can be resisted by other means, as determined by the Gamemaster. In addition, armor can help against some FX, especially attacks that act as low impact (LI), high impact (HI), or energy (En) weapons.

FX Energy Recovery

A hero's FX energy loss reflects how much "inner strength" he has to power his FX skills. If this strength runs out, FX can't be used until he recovers some of his FX energy.

FX energy points for Arcane Magic or Super Power skills are recovered at a rate of 1, 2, or 3 per hour, based on the result of a Will feat check or a Resolve-mental resolve skill check: Critical Failure, lose another FX energy point (suffer 1 point of fatigue damage if no points are available);

Failure, no recovery this hour; Ordinary, recover 1 point; Good, 2 points; Amazing, 3 points. No recovery occurs during an hour in which a character tries to use FX. If a character spends a full eight hours resting and not attempting to use FX, all FX energy points are recovered (unless you have a story reason to keep a hero, villain, or alien exhausted).

For Faith, the recovery process is a bit different. The character must actively worship and pray for the recovery of FX energy—recharging a spiritual battery. Part of every day must be spent in prayer and meditation. At the end of the day, FX energy points are recovered at a rate of 1, 2, or 3 points based on the result of a Will feat check or a Resolve-*mental* resolve skill check. No recovery occurs during a day in which a character attempt to use Faith FX. If the faithful character achieves a Critical Failure result, he has somehow lost his way and must perform some form of penance before he can once again begin recovering FX energy.

Some FX Examples

Here are examples of each kind of FX described in this section. Players and Gamemasters are encouraged to create any FX they feel will fit into and improve their campaigns. Included in each description are the point costs related to the design of the specialty skill.

Fate Casting

Arcane Magic, Augur spell: WIL; Good quality, base cost 6

This spell determines the possible fate of a character within the next 24 hours (6 pts); provides general information (3 pts); and requires the casting of runestones (-1 pt) over the course of a skill check of Good complexity (-2 pts).

Bolt of Lightning

Arcane Magic, Conjure spell: WIL; Good quality, base cost 5

This spell aims a bolt of lightning at an target (energy attack, 3 pts). It inflicts Ordinary damage (0 pts) of d4s/d4w/d4+2w (low stun, 1 pt; low wound, 2 pts). The bolt's range is 2/4/6 meters (2 pts). Trappings are a wood shavings from a lightning-struck tree (-1 pt) and a skill check of Good complexity (-2 pts).

Fly

Arcane Magic, Summon spell: WIL; Good quality, base cost 9

This spell allows the caster to fly (6 pts) at a rate equal to his fly movement rate (see TABLE P8: COMBAT MOVEMENT RATES in the *Player's Handbook*). This flight lasts for 2 minutes (4 pts). It requires a component of soap bubbles (-1 pt) and a simple skill check.

Enchant Weapon

Arcane Magic, Transform spell: PER; Amazing quality, base cost 11

This spell temporarily bestows magical qualities upon an ordinary weapon, making it more potent in battle. It provides a 3-point bonus to damage inflicted by the weapon (6 pts), and the weapon remains enchanted for 3 minutes (6 pts). Casting requires a component of silver dust sprinkled over the item (-1 pt) and a simple skill check to activate.

Divine Guidance

Faith, Ordinary miracle: WIL; Ordinary quality, base cost 5

With this miracle, the character prays for advice concerning a particular course of action—"Should we enter the alien structure?" or "Should I turn over the data disk to the government official?" The answer comes in the form of a feeling or sense of the rightness or wrongness of an action. The guidance is equivalent to general knowledge.

Divine Blessing

Faith, Good miracle: WIL; Good quality, base cost 10

When this prayer is answered, the miracle worker causes a divine agency to bestow a blessing. This blessing takes the form of a -1 bonus to the group's action checks and adds +1 to the group's resistance modifiers for the duration of the miracle. The blessing remains in effect for 2 rounds.

Song of the Eagle

Faith, Amazing miracle: WIL; Amazing quality, base cost 15

This prayer is answered by changing the miracle worker into an eagle for 1 hour. As an eagle, the character retains his own Intelligence and memories, though he interacts with the world as an eagle would—he can fly, screech, and hunt, and has excellent vision. As an eagle, the charac-

ter has a durability rating of 6/6/3. Once the eagle is knocked unconscious or runs out of mortal points, the character returns to his normal form; the damage suffered in the eagle's form remains when the character transforms back to normal.

Cloak of Invisibility

Super Power, Relic: DEX; Amazing quality, base cost 12

When the word of power is spoken, the cloak turns its wearer invisible. While activated, it provides a -3 bonus (7 pts) to all Stealth checks and adds +2 to the resistance modifiers of the caster for any attacks that require seeing the target (5 pts).

Strength of the Behemoth

Super Power, Extreme Ability: CON; Good quality, base cost 9

This power increases the character's Strength score by as much as 3 (10 pts) for as long as the FX energy lasts. Every round, this power uses up 2 points of FX energy. An FX check is required to activate the power; degree of success indicates the actual Strength increase (+1/+2/+3). This FX has a limitation: In the cold (0° Celsius or less), the check is made with a +1 penalty (-1 pt).

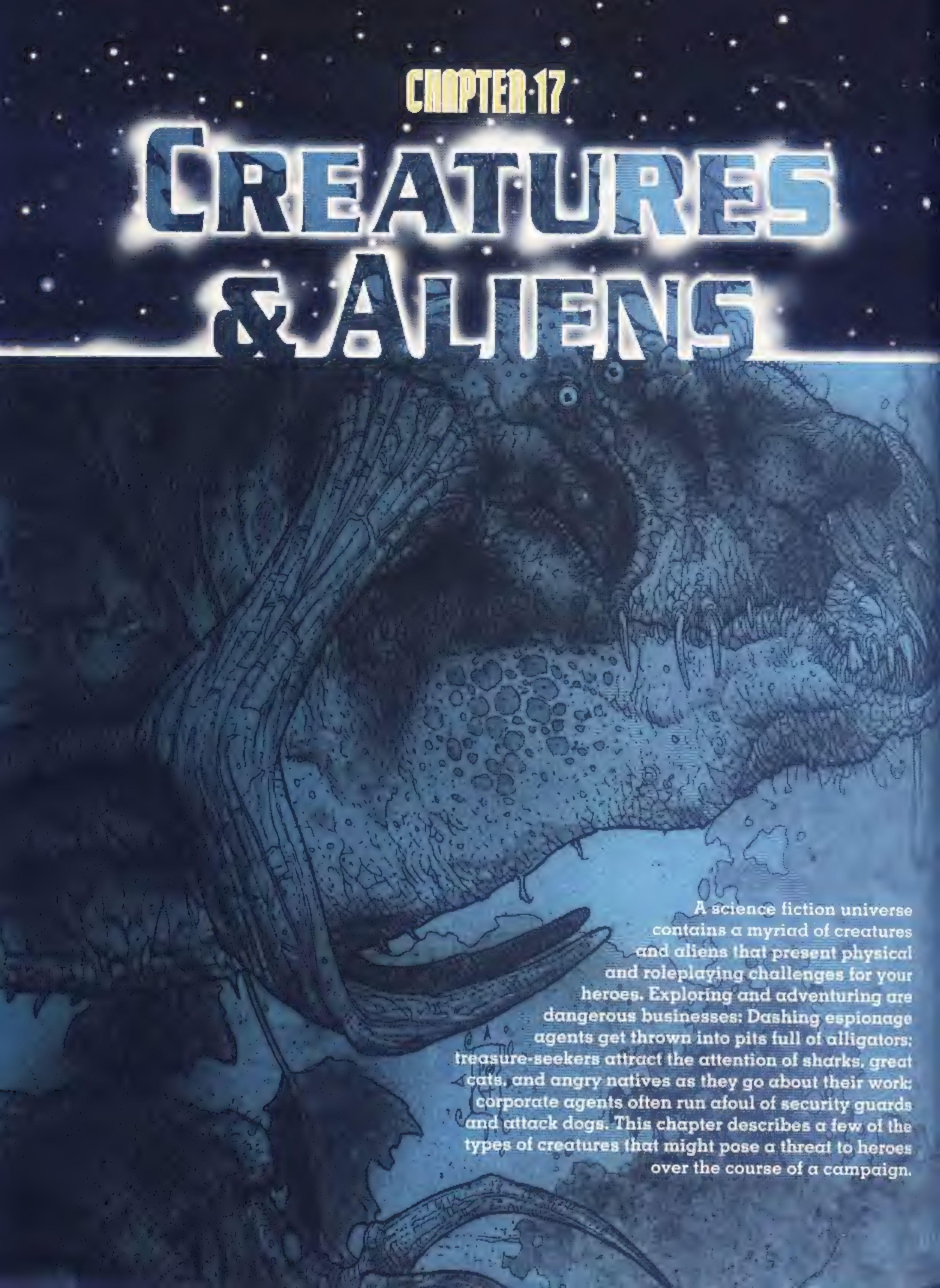
Web Spinneret

Super Power, Overscience gadget: DEX; Ordinary quality, base cost 2

The web spinneret is an overscience device worn around the character's wrist. It consists of cartridge cylinders, a touch-activated firing mechanism, and a high-powered compressor that expels chemical webbing from a nozzle. When activated, the web spinneret fires a line of superstrong, ultrathin material that sticks to a distant object. The webline can be used to swing across open spaces, aid Athletics-climb skill checks, or stop falls. The cost is 1 FX energy point per use or per 10 meters of line expelled. The line has a range of 10/20/30 meters (4 pts), with a +2 and +3 penalty for medium and long range attempts. An FX skill check is required to activate; when FX energy is exhausted, the web material must be replenished, which requires a Technical Science-repair skill check of Good complexity (-2 pts). The webline has an effective Strength score of 16.

CHAPTER 17

CREATURES & ALIENS



A science fiction universe contains a myriad of creatures and aliens that present physical and roleplaying challenges for your heroes. Exploring and adventuring are dangerous businesses: Dashing espionage agents get thrown into pits full of alligators; treasure-seekers attract the attention of sharks, great cats, and angry natives as they go about their work; corporate agents often run afoul of security guards and attack dogs. This chapter describes a few of the types of creatures that might pose a threat to heroes over the course of a campaign.

ANIMAL & ALIEN STATISTICS

The animals and nonhumanoid aliens described in this chapter have the same kinds of game statistics as heroes do—figures such as Ability Scores, resistance modifiers, and skill scores. However, they don't always "play by the rules" in terms of statistics that are derived from other values.

For instance, we've given the mule a Strength score of 14 and a Dexterity of 10. It does damage by kicking, a form of attack that is related to both Strength and Dexterity, but its attack succeeds only on a result of 8 or lower. Don't be surprised when you see apparent inaccuracies such as these in the descriptions that follow—some numbers are purposefully modified to yield a clearer picture of what a certain type of creature is like.

Ability Scores

In the statistical summaries that follow, each animal and alien is given a single value for each Ability Score. These numbers describe a typical creature of the type. In addition, a number range is given in parentheses alongside each typical score. This range, represented by a die roll added to a constant, allows you to create individual creatures with Ability Scores that may be higher or lower than their species' average.

For example, the typical great ape has a Strength score of 16. You could,

however, roll d6 and add the result to 12 to create an individualized great ape. This particular ape would have a Strength score between 13 and 18.

In general, a creature's Ability Scores can be used as a basis for comparing the creature to a human; for instance, a typical great ape is stronger than the strongest normal human (whose STR can't be higher than 14). But the comparison doesn't always hold true when you consider how a creature is capable of using its Abilities—just because a horse has a Dexterity of 10 doesn't mean it's more agile than an average human, who has a Dexterity of 9. Always take into account the nature of a creature when determining what its Ability Scores enable it to accomplish.

Intelligence and Personality are treated differently; for these Abilities, the number range in parentheses is preceded by the word "Animal." This value is an indicator of the creature's level of ability in relation to other animals. For instance, dogs are smart animals—they can solve mazes, recognize when a human is angry, and use effective pack tactics when attacking prey in the wild. But it's ludicrous to assign a typical dog a higher Intelligence score than a slow-witted human.

Thus, the entry for a dog's Intelligence is "INT 3 (Animal 11 or d4+9)." This means that no dog is as intelligent as a human, but the typical dog has an effective Intelligence score of 11 when attempting to do something Intelligence-related that an animal is capable of—negotiate a maze, understand a simple command, use a

sound or a gesture to communicate some information. (If you want, you can roll d4 and add 9 to the result to determine this statistic for a particular dog.)

Personality works much the same way for nonsentient animals. Sociable animals have a high Personality score to reflect the fact that they work well with each other. But on the human scale, these animals' Personality scores don't exceed 2 or 3.

Additionally, animals are extremely limited in their use of encounter skills; while it's conceivable that a dog might *intimidate* someone with a growl, or convince a hero to follow it to its trapped master with a successful Intelligence or Personality feat check, it makes a lot more sense for you to dispense with game mechanics in such situations: Let the players decide if their heroes will go where the dog wants them to go.

Attacks and Defenses

An animal's or alien's preferred form(s) of attack and innate defenses appear in this section. Use a +d0 base situation die on a check to see if an attack succeeds. Predators naturally have higher attack scores and damage ratings than herbivores and nonaggressive animals. Adjustments for Strength are already included in the damage figures.

The attack scores listed pertain to a typical creature of the species; if you create a creature whose Strength or Dexterity is higher or lower than the average, adjust the attack scores and damage ratings accordingly.

Skills

Most animals and alien creatures possess a short list of broad skills (and in many cases, a specialty skill or two) that work much like a hero's skills. These represent the innate abilities that an animal or alien creature possesses; unlike humans or intelligent aliens, animals can't learn new skills or improve their scores in existing skills.

A number in brackets represents the creature's score in the broad skill or specialty skill that was just mentioned. For instance, the skill list for the great ape begins with "Athletics [16]—*climb* [18]." This means that the creature has a score of 16 for skill checks related to the Athletics broad skill, and a score of 18 for skill checks that involve climbing (which is the same as saying the creature has rank 2 in the *climb* specialty). For a particular ape with a Strength score other than 16, these scores would be adjusted up or down as necessary.

Animals in Combat

Animals don't attack just because a human crosses their path. Rather, these creatures attack because they're frightened, angered, startled, or (in rare cases) hungry. Unless an animal is actively hunting for a meal, it engages in some kind of display designed to warn the hero off—such as growling, bluffing a charge, beating its chest, and so on.

If an animal does stalk a hero, it attempts to use Stealth in order to surprise the hero. This is a natural tactic of predators everywhere—the closer a predator gets before its prey notices, the better its chances of killing the unsuspecting creature.

When an animal attacks a human, it naturally tries to close with the victim. A large animal's first attack, for example, is often an attempt to knock its human target flat, so that it can easily bite and claw its prey. Refer to the "Overpowering" section on page 43 in *Chapter 3: Game-masters in Action* for more detail. An animal with several attack options can often try one of each (biting and clawing, for example) as a single action.

Few animals fight to the death. Once an animal suffers substantial wound damage—or even if it fails its initial attack—it's likely to break off the fight and move away. Of course, there are always exceptions. Creatures such as crocodiles and sharks sometimes lack the ability to realize that they've been mortally wounded, and bad-tempered predators such as grizzly bears might lapse into a state of rage as part of a show of resistance.

ANIMAL COMPENDIUM

The material that follows is by no means a complete listing of every dangerous creature, but it contains enough information for you to get started, and serves as a guide to designing creatures specific to your setting. For example, a cougar is basically a great cat that's smaller than a jaguar or a leopard, so you can use the description for "Cat, great" and reduce the animal's Strength and Constitution scores a bit. Similarly, you can use the stats for "Shark" to create a smaller carnivorous fish such as a barracuda—scale back Strength and Constitution somewhat, add a few points of Dexterity, and change the resistance modifier vs. ranged attacks to +2 or +3 to reflect the smaller creature's improved dodging ability.

Ape, Great

STR 16	(d6+12)	INT 3	(Animal 11 or d6+8)
DEX 10	(d6+7)	WIL 14	(d4+12)
CON 16	(d4+13)	PER 3	(Animal 10 or d4+8)
Durability: 16/16/8/8		Action check: 14+/13/6/3	
Move: sprint 40, run 24, walk 8		#Actions: 3	
Reaction score: Ordinary/2			

Attacks

Pummel	18/9/4	d6+4s/d6+2w/2d4+2w	LI/O
Bite	16/8/4	d4+1s/d4w/d4+1w	LI/O

Defenses

+3 resistance modifier vs. melee attacks
 +1 resistance modifier vs. ranged attacks
 Armor: d4-2 (LI), none (HI), d4-2 (En)

Skills

Athletics [16]—*climb* [18]; Movement [16]; Stamina [16]—*endurance* [18]; Awareness [14]—*intuition* [17], *perception* [15]; Investigate [14]—*search* [15]; Resolve [14].

Great apes include gorillas and orangutans. In the wild, they avoid man and only attack if startled or harassed. These animals are enormously strong and make use of overpowering (see Chapter 3) if pushed into a fight.

Baboon

STR 12	(d4+10)	INT 3	(Animal 10 or d4+8)
DEX 12	(d4+10)	WIL 11	(d4+9)
CON 8	(d6+5)	PER 3	(Animal 12 or d4+10)
Durability: 8/8/4/4		Action check: 14+/13/6/3	
Move: sprint 48, run 28, walk 8		#Actions: 3	
Reaction score: Ordinary/2			

Attacks

Bite	14/7/3	d4+2s/d4+1w/d4+3w	LI/O
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Defenses

+2 resistance modifier vs. melee attacks
 +2 resistance modifier vs. ranged attacks
 Armor: d4-1 (LI), none (HI), d4-2 (En)

Skills

Athletics [12]—*climb* [14]; Acrobatics [12]; Stamina [8]—*endurance* [14]; Awareness [11]—*intuition* [14], *perception* [12]; Investigate [11]—*search* [12]; Resolve [11].

Baboons can be extremely dangerous animals. They are aggressive and intelligent, and travel in troops numbering in the dozens. A single animal is more than a match for an adult human, and unlike other primates, baboons don't always avoid confrontations with groups of humans.

Bear

STR 15	(d4+12)	INT 2	(Animal 8 or d4+6)
DEX 8	(d4+6)	WIL 14	(d4+12)
CON 16	(2d4+10)	PER 2	(Animal 6 or d4+4)
Durability: 24/24/12/12		Action check: 12+/11/5/2	
Move: sprint 50, run 36, walk 8		#Actions: 3	
Reaction score: Ordinary/2			

Attacks

Bite	16/8/4	d4w/d6+1w/d6+3w	LI/O
Claws	16/8/4	d6+1s/d4+1w/d6+2w	LI/O

Defenses

+3 resistance modifier vs. melee attacks
no resistance modifier vs. ranged attacks
Armor: d6 (LI), d4-1 (HI), d6-1 (En)

Skills

Athletics [15]; Stamina [16]–*endurance* [20]; Awareness [14]–*intuition* [17]; Investigate [14]–*search* [15], *track* [15]; Resolve [14]–*physical resolve* [17].

This entry describes a large brown bear, or possibly a small grizzly. A polar bear or a large grizzly would have an even higher Strength score and cause more damage with its attacks. Given a chance, most bears will avoid humans. Bears are more likely to attack because they've been startled than because they're hungry.

Buffalo

STR 15	(2d4+10)	INT 2	(Animal 6 or d4+4)
DEX 6	(d4+4)	WIL 9	(d4+7)
CON 14	(2d4+10)	PER 3	(Animal 11 or d4+9)
Durability:	21/21/10/10	Action check:	9+/8/4/2
Move:	sprint 46, run 30, walk 6	#Actions:	2
Reaction score:	Marginal/1 (Charge: Good/1)		

Attacks

Charge	13/6/3	d8+1s/d12+1s/d8w	LI/O
Gore/loss	13/6/3	d6s/d6+2s/d6w	LI/O

Defenses

+3 resistance modifier vs. melee attacks
no resistance modifier vs. ranged attacks
Armor: d6-1 (LI), d4-2 (HI), d6-2 (En)

Skills

Movement [14]; Stamina [14]; Awareness [9]–*intuition* [12]; Resolve [9].

Any wild Earth bovine such as the bison, the water buffalo, or the Cape buffalo of South Africa is represented by this entry. Different species vary in temperament and aggressiveness; most wild buffalo go out of their way to avoid humans, but some might stand their ground or charge if they are harassed. The buffalo begins a fight by mounting a powerful charge, after which it tries to trample or gore the offending creature.

Cat, Great

STR 14	(d4+12)	INT 2	(Animal 9 or d4+7)
DEX 12	(d4+10)	WIL 12	(d4+10)
CON 12	(d4+10)	PER 3	(Animal 10 or 2d4+5)
Durability:	12/12/6/6	Action check:	14+/13/6/3
Move:	sprint 60, run 36, walk 12	#Actions:	3
Reaction score:	Good/2		

Attacks

Bite	15/7/3	d4w/d6+1w/d4m	LI/O
Claws	17/8/4	d4+1s/d4+1w/d6+1w	LI/O

Defenses

+3 resistance modifier vs. melee attacks
+2 resistance modifier vs. ranged attacks
Armor: d4-1 (LI), none (HI), d4-1 (En)

Skills

Athletics [14]–*climb* [15], *jump* [15]; Acrobatics [12]–*fall* [16]; Stealth [12]–*sneak* [15], *shadow* [15]; Stamina [12]–*endurance* [16]; Awareness [12]–*intuition* [14]; Resolve [12].

Great cats include predators such as lions, tigers, jaguars, leopards, panthers, and cougars. In the wild, they tend to avoid groups of humans, but it's not uncommon for a great cat to attack a solitary human.

The statistics above describe a medium-sized jungle cat—a jaguar or a leopard; lions and tigers are larger and more powerful, possessing higher Strength and Constitution scores, as well as causing an additional 1 or 2 points of damage.

Crocodile

STR 14	(d4+11)	INT 1	(Animal 4 or d4+2)
DEX 9	(d4+6)	WIL 10	(d4+7)
CON 14	(2d4+11)	PER 1	(Animal 5 or d4+3)
Durability:	14/14/7/7	Action check:	12+/11/5/2
Move:	sprint 30, run 20, walk 4, swim 18	#Actions:	3
Reaction score:	Ordinary/2		

Attacks

Bite	15/7/3	d4+1w/d6+2w/d4m	LI/O
Tail lash	8/4/2	d4s/d4+2s/d8+1s	LI/O

Defenses

+2 resistance modifier vs. melee attacks
no resistance modifier vs. ranged attacks
Armor: d6+1 (LI), d6-1 (HI), d4 (En)

Skills

Stealth [9]–*hide* [11], *sneak* [12]; Stamina [14]–*endurance* [16], *resist pain* [16]; Awareness [10]–*intuition* [12]; Resolve [10]–*physical resolve* [12].

Crocodiles attack by dragging prey underwater and drowning it. A crocodile will almost always try to overpower its chosen target with its first attack and drag it into deeper water. The animal can only use its tail lash against a target standing behind it.

Dog, Attack

STR 11	(d4+9)	INT 3	(Animal 11 or d4+9)
DEX 11	(d4+9)	WIL 12	(d4+10)
CON 9	(d4+7)	PER 3	(Animal 11 or d4+9)
Durability:	9/9/5/5	Action check:	14+/13/6/3
Move:	sprint 56, run 36, walk 10	#Actions:	3
Reaction score:	Ordinary/2		

Attacks

Bite	13/6/3	d6s/d4w/d4+2w	LI/O
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Defenses

+1 resistance modifier vs. melee attacks
+1 resistance modifier vs. ranged attacks
Armor: d4-2 (LI), none (HI), none (En)

Skills

Stealth [11]–shadow [12]; Movement [9]–race [10]; Stamina [9]–endurance [12]; Awareness [12]–intuition [15], perception [13]; Investigate [12]–track [16]; Resolve [12]–physical resolve [13].

Attack dogs are large, well-trained police animals. Most are trained to overpower fleeing humans and bite their arms and legs to keep their opponents off balance. It's possible to train such canines in the use of deadly force.

Elephant

STR 22 (2d4+17) INT 3 (Animal 11 or d4+9)
DEX 4 (d4+1) WIL 11 (d4+9)
CON 18 (2d4+13) PER 3 (Animal 13 or d4+11)
Durability: 27/27/13/13 Action check: 10+/9/4/2
Move: run 24, walk 6 #Actions: 2
Reaction score: Marginal/1

Attacks

Trample 11/5/2 2d6s/2d4+1w/2d6+2w LI/G

Defenses

+5 resistance modifier vs. melee attacks
–1 resistance modifier vs. ranged attacks
Armor: d6+1 (LI), d6–1 (HI), d6 (En)

Skills

Movement [18]; Stamina [18]; Awareness [11]–intuition [15], perception [12]; Resolve [11]–physical resolve [14].

A rampaging elephant can give even the most combative of heroes a cause for concern. Domesticated elephants are unlikely to turn on humans unless they are gravely mistreated. Elephants in the wild, however, may charge humans who come too close to the herd.

Horse

STR 16 (d6+12) INT 2 (Animal 7 or d4+5)
DEX 10 (d4+4) WIL 9 (d4+7)
CON 14 (2d4+9) PER 3 (Animal 9 or d4+7)
Durability: 14/14/7/7 Action check: 9+/8/4/2
Move: sprint 60, run 36, walk 12 #Actions: 2
Reaction score: Marginal/1

Attacks

Trample 8/4/2 d6+1s/d4w/d4+2w LI/O

Defenses

+2 resistance modifier vs. melee attacks
no resistance modifier vs. ranged attacks
Armor: d6–3 (LI), none (HI), d6–3 (En)

Skills

Movement [14]; Stamina [14]–endurance [16]; Awareness [9]–intuition [10]; Resolve [9]–physical resolve [12].

This animal is a typical riding horse. A draft horse or war horse is slightly larger and more powerful, but slower. Wild horses and trained war horses have a better attack score (14/7/3).

Mule

STR 14 (d6+10) INT 2 (Animal 8 or d4+6)
DEX 10 (d4+8) WIL 12 (d4+9)
CON 14 (2d4+9) PER 3 (Animal 9 or d4+7)
Durability: 14/14/7/7 Action check: 11+/10/5/2
Move: sprint 40, run 30, walk 12 #Actions: 2
Reaction score: Marginal/1

Attacks

Kick 8/4/2 d6s/d4w/d4+1w LI/O

Defenses

+2 resistance modifier vs. melee attacks
no resistance modifier vs. ranged attacks
Armor: d6–3 (LI), none (HI), d6–3 (En)

Skills

Athletics [14]; Movement [14]; Stamina [14]–endurance [18]; Acrobatics [10]–balance [11]; Awareness [12]–intuition [14]; Resolve [12]–physical resolve [16].

While a mule isn't as strong or as fast as a horse, it's a much better pack animal. A mule can negotiate a difficult trail that a horse might not even attempt.

Scorpion

STR 2 (d4+0) INT 1 (Animal 3 or d4+1)
DEX 14 (d4+12) WIL 8 (d4+6)
CON 3 (d4+1) PER 1 (Animal 3 or d4+1)
Durability: 3/3/2/0 Action check: 14+/13/6/3
Move: run 20, walk 10 #Actions: 2
Reaction score: Ordinary/2

Attacks

Sting 8/4/2 1s/1s/1s LI/O
plus poison (see text)

Defenses

+1 resistance modifier vs. melee attacks
+2 resistance modifier vs. ranged attacks
Armor: none (LI), none (HI), none (En)

Skills

Stealth [14]–hide [16], sneak [16]; Stamina [3]–endurance [6]; Awareness [8]–intuition [12], perception [10].

Scorpions range in size from creatures no larger than a human's thumbnail to foot-long giants of the Algerian desert. Although a scorpion's sting is rarely fatal, almost all such attacks are excruciatingly painful. See "Poison" in Chapter 3: Gamemasters in Action. Consider the sting of a typical scorpion as an irritant, providing a +3 penalty to the victim's Constitution feat check. Deadly scorpions possess a neurotoxin that provides no modifier to the victim's Constitution feat check. In either case, the onset time is 2 rounds and the poison's duration is 12 hours.

Shark

STR 15 (2d4+10) INT 2 (Animal 5 or d4+3)
DEX 8 (d4+6) WIL 9 (d4+7)
CON 14 (d4+12) PER 1 (Animal 4 or d4+2)
Durability: 14/14/7/7 Action check: 12+/11/5/2
Move: swim 60 #Actions: 3
Reaction score: Ordinary/2

Attacks
 Bite 16/8/4 d6+2w/d8+3w/d4+2m LI/O

Defenses
 +2 resistance modifier vs. melee attacks
 +1 resistance modifier vs. ranged attacks
 Armor: d4 (LI), d4-1 (HI), d4+1 (En)

Skills
 Movement [14]; Stamina [14]-endurance [18]; Awareness [9]-perception [12]; Resolve [9]-physical resolve [12].

Like many other creatures, sharks come in a variety of sizes and shapes. A number of species are basically harmless to man, but these aren't the types of sharks that show up in roleplaying scenarios: usually when the heroes deal with a shark, they face a hungry man-eater. Use the statistics above to reflect large hammerheads, tiger sharks, or even makos or blue sharks.

Snake, Constrictor

STR 14 (d8+10) INT 2 (Animal 5 or d4+3)
 DEX 8 (d4+6) WIL 10 (d4+8)
 CON 10 (d4+8) PER 1 (Animal 4 or d4+2)
 Durability: 10/10/5/5 Action check: 10+/9/4/2
 Move: walk 14, swim 20 #Actions: 2
 Reaction score: Marginal/1

Attacks
 Constrict 15/7/3 d6+1s/d4+1w/d4+3w LI/O

Defenses
 +2 resistance modifier vs. melee attacks
 +1 resistance modifier vs. ranged attacks
 Armor: d4 (LI), d4-2 (HI), d4-1 (En)

Skills
 Stealth [8]-hide [12]; Stamina [10]-endurance [14]; Awareness [10]; Resolve [10]-physical resolve [14].

Pythons, boas, anacondas, and similar snakes fall into this classification. Only the largest constrictors (5 meters or more in length) are dangerous to adult humans.

During its attack, a constrictor tries to overpower its victim (see "Overpowering" in Chapter 3) in order to gain a hold on the target. After it secures its victim, the constrictor tightens its coils. The snake gains a -2 bonus on subsequent attacks made against an individual ensnared by its coils—but other opponents get a -2 bonus on attacks against the snake while it's holding a victim. A trapped victim has a +2 penalty on any attempt to break free using an opposed Strength feat check against the snake's Strength.

Snake, Venomous

STR 8 (d4+6) INT 2 (Animal 5 or d4+3)
 DEX 10 (d4+8) WIL 10 (d4+8)
 CON 8 (d4+6) PER 1 (Animal 4 or d4+2)
 Durability: 8/8/4/4 Action check: 13+/12/6/3
 Move: run 24, walk 10 #Actions: 2
 Reaction score: Ordinary/1

Attacks
 Bite 12/6/3 1s/1w/d4w LI/O
 plus poison (see text)

Defenses
 +1 resistance modifier vs. melee attacks
 +1 resistance modifier vs. ranged attacks
 Armor: d4-1 (LI), none (HI), d4-2 (En)

Skills
 Stealth [10]-hide [16]; Stamina [8]-endurance [12]; Awareness [10]; Resolve [10]-physical resolve [12].

The snake described is a good-sized rattlesnake or cobra, 2 to 3 meters in length. Depending on the species, the snake's poison is either a hemotoxin (rattlesnake) or neurotoxin (cobra); see "Poison" in Chapter 3: Gamemasters in Action for details. Snake venom is insinuating, which means that a snake must penetrate a victim's armor and inflict primary damage for the poison to affect the target.

The potency of the toxin affects the victim's Constitution feat check to resist the poison. Depending on the snake, the modifier to this check ranges from a -2 bonus to a +4 penalty. Big rattlers possess venom with a +1 penalty, while large cobras have poison with a +3 penalty. The onset time is anywhere from 1 to 10 minutes, and the duration varies widely depending on the snake.

Whale, Humpback

STR 22 (2d4+17) INT 4 (Animal 13 or d4+11)
 DEX 4 (d4+2) WIL 16 (d4+13)
 CON 20 (2d6+13) PER 4 (Animal 13 or d4+11)
 Durability: 30/30/15/15 Action check: 7+/6/3/1
 Move: swim 40 #Actions: 2
 Reaction score: Marginal/1

Attacks
 Ram 10/5/2 d8+1s/d12+2s/d4+2w LI/G
 Tail slap 10/5/2 d6s/d8+1s/d12+2s LI/G

Defenses
 Good toughness
 +1 resistance modifier vs. melee attacks
 -1 resistance modifier vs. ranged attacks
 Armor: d8 (LI), d6 (HI), d8 (En)

Skills
 Movement [20]; Stamina [20]; Awareness [16]-intuition [18], perception [18]; Resolve [16].

Whales are the largest animals in Earth's biosphere. The mighty blue whale tips the scales at over 100 tons, but the humpback is a much smaller animal—rarely weighing more than 25 tons. Due to their size, whales resist damage as Good targets, causing damage from Ordinary weapons to be downgraded against them.

Whales are quite intelligent (for animals); they communicate by "singing," emitting sounds that carry for dozens of kilometers under the right conditions. Most whales avoid humans, but if heroes manage to make a humpback mad at them, the animal attacks like a living battering ram. An angry whale can easily wreck a small boat.

ALIEN COMPENDIUM

This section describes a number of generic alien creature types to help set the stage for a science fiction game. You can use these entries or disregard them as you wish. While it's absurd to assume that every alien world has creatures corresponding to wolves, bears, or tigers, it's not too far-fetched to assume that a particular world has one or two creatures that fill similar ecological niches.

These alien entries are deliberately vague. You should decide the details about a specific creature of any type—such as appearance, hunting methods, habitat, and voraciousness. Take these basic statistics and exercise your imagination to populate your worlds with all kinds of dangerous critters!

Amphibian

STR 15 (d4+12) INT 1 (Animal 4 or d4+2)
 DEX 8 (d4+5) WIL 8 (d4+5)
 CON 17 (d4+15) PER 1 (Animal 4 or d4+2)
 Durability: 17/17/9/9 Action check: 9+/8/4/2
 Move: run 20, walk 4, swim 20 #Actions: 2
 Reaction score: Marginal/1

Attacks

Tongue 8/4/2 d4s/d4+1s/d4+2s LI/O
 Bite 13/6/3 d4+2w/d6+3w/d4m LI/O

Defenses

+2 resistance modifier vs. melee attacks
 no resistance modifier vs. ranged attacks
 Armor: d4 (LI), d4-2 (HI), d4-1 (En)

Skills

Stealth [8]-hide [10]; Stamina [17]-endurance [18]; Awareness [8]-intuition [10]; Resolve [8]-physical resolve [14].

The alien amphibian is a slow-moving, primitive predator the size of a large crocodile. It may appear froglike or salamanderlike, or may even resemble a legless, eellike creature. It hunts from the concealment of muddy rivers or bogs, using its sticky tongue to snare careless creatures that venture too close.

The alien's tongue has a range of 6 meters; if the amphibian makes a successful Dexterity feat check, it inflicts the listed damage and snares its victim as indicated by the degree of success of the attack (see "Overpowering" in *Chapter 3: Gamemasters in Action*). In the next phase, the victim is drawn to the creature's mouth unless it can match or exceed the amphibian's degree of success on a Strength feat check. If the amphibian can't draw its victim to its mouth, or if its tongue is damaged by any attack, the creature lets go. The amphibian gains a -2 bonus to bite any victim snared by its tongue.

Arachnid

STR 7 (d4+4) INT 1 (Animal 3 or d4+1)
 DEX 15 (2d4+10) WIL 10 (d6+7)
 CON 6 (d4+3) PER 1 (Animal 3 or d4+1)
 Durability: 6/6/3/3 Action check: 17+/16/8/4
 Move: run 50, walk 10, (jump 10) #Actions: 2
 Reaction score: Good/2

Attacks

Bite 12/6/3 d4-2s/d4s/d4-1w LI/O
 plus poison (see text)

Defenses

+1 resistance modifier vs. melee attacks
 +3 resistance modifier vs. ranged attacks
 Armor: d4+1 (LI), d4-2 (HI), d4-2 (En)

Skills

Athletics [7]-climb [16], jump [14]; Stealth [15]-hide [18], sneak [16]; Stamina [6]-endurance [10]; Awareness [10]-intuition [12]; Resolve [10].

Alien arachnids are larger and more dangerous versions of Earth spiders. The typical arachnid weighs about 20 kg, and its body is the size of a small dog's. The creature described here resembles a giant wolf spider, a leaper that springs on unsuspecting heroes with bounds of up to 10 meters.

The alien arachnid possesses powerful fangs capable of injecting a lethal venom. Its poison combines the effects of a paralytic agent and a necrotoxin, inflicting a +2 penalty to the victim's Constitution feat check to resist the toxin. The onset time for the poison is 2 rounds, and its duration is 2 hours (see "Poison" in *Chapter 3: Gamemasters in Action*). The bite must cause at least 1 point of damage in order for the poison to take effect.

Arthropod

STR 4 (d4+1) INT 1 (Animal 3 or d4+1)
 DEX 15 (2d4+10) WIL 8 (d6+5)
 CON 2 (d4+0) PER 1 (Animal 3 or d4+1)
 Durability: 2/2/1/1 Action check: 15+/14/7/3
 Move: walk 6, fly 60 #Actions: 2
 Reaction score: Good/1

Attacks

Bite 10/5/2 d4-1s/d4-2w/d4w LI/O
 plus blood drain (see text)

Defenses

no resistance modifier vs. melee attacks
 +4 resistance modifier vs. ranged attacks
 Armor: none (LI), none (HI), none (En)

Skills

Acrobatics [15]-flight [16]; Stamina [2]-endurance [4]; Awareness [8]-intuition [12]; Investigate [8]-track [12]; Resolve [8].

This alien resembles a dragonfly of alarming proportions. Its body is as long as a man's forearm, and it pursues warm-blooded prey relentlessly. Like many biting flies, it regards humans as food. The creature would be little more than a nuisance, except that it's often encountered in swarms of hundreds—though only four or five arthropods can attack any single target in a single round.

If the creature's bite causes at least 1 point of wound damage, the animal inserts a feeding tube into the wound and begins to suck blood, causing 1 additional point of wound damage per round. It continues feeding until pulled off, killed, or sated by consuming 3 wound points' worth of blood. A hero might dislodge the creature by using insecticide, jumping into a lake, or getting close to a smoky fire.

Avian

STR 8 (d6+5) INT 2 (Animal 7 or d4+5)
 DEX 15 (d6+12) WIL 11 (d4+9)
 CON 6 (d4+4) PER 2 (Animal 6 or d4+4)
 Durability: 6/6/3/3 Action check: 15+/14/7/3
 Move: walk 10, fly 100 #Actions: 3
 Reaction score: Good/2

Attacks

Talons	12/6/3	d4s/d4w/d4+1w	LI/O
Beak	10/5/2	d4-1s/d4s/d4w	LI/O

Defenses

+1 resistance modifier vs. melee attacks
 +3 resistance modifier vs. ranged attacks
 Armor: d4-1 (LI), none (HI), d4-1 (En)

Skills

Acrobatics [15]-*flight* [17]; Stealth [15]; Stamina [6]-*endurance* [11]; Awareness [11]-*intuition* [13], *perception* [17]; Resolve [11]-*physical resolve* [12].

The avian is a large, birdlike predator comparable to a golden eagle in size and temperament. It's unlikely to attack large groups of humans unless its nest or lair is endangered—although small humans or wounded characters might attract a hungry avian's attention.

When the avian attacks, it swoops silently at its prey from great altitudes, gaining a -2 bonus to its initial Stealth skill check and its first attack. It can only strike with its talons in this swoop, but in subsequent rounds it can use both its talons and its beak. The avian lights from the air and is able to make attacks from different directions each time it has an action.

Bovine

STR 17 (2d4+12) INT 2 (Animal 7 or d4+5)
 DEX 6 (d4+4) WIL 8 (d4+6)
 CON 18 (2d4+13) PER 3 (Animal 10 or d4+8)
 Durability: 27/27/13/13 Action check: 10+/9/4/2
 Move: sprint 52, run 30, walk 8 #Actions: 2
 Reaction score: Marginal/1 (Charge: Good/1)

Attacks

Charge	15/7/3	d8+2s/d12+2s/d8+2w	LI/G
Gore/trample	15/7/3	d8s/d6w/d6+2w	LI/O

Defenses

+2 resistance modifier vs. melee attacks
 no resistance modifier vs. ranged attacks
 Armor: d6+2 (LI), d4 (HI), d6 (En)

Skills

Movement [18]; Stamina [18]-*endurance* [20]; Awareness [8]-*intuition* [10]; Resolve [8].

Bovines aren't merely cows; their family includes much more formidable animals such as buffalo and wild cattle. The alien bovine fills a similar ecological niche to its Earth counterpart. It's a large grazer weighing more than one ton. Bovines have tough hides or chitinous armor, as well as a rack of horns, and large slashing tusks.

The grazer typically moves away from large groups of

humans, but if startled or harassed it's likely to respond with a devastating charge. After its initial charge, the creature tries to gore, toss, or trample any individuals remaining in the vicinity.

Canine

STR 12 (d4+10) INT 4 (Animal 13 or d4+11)
 DEX 10 (d4+8) WIL 14 (d4+12)
 CON 10 (d4+8) PER 3 (Animal 11 or d4+9)
 Durability: 10/10/5/5 Action check: 15+/14/7/3
 Move: sprint 70, run 40, walk 10 #Actions: 3
 Reaction score: Good/2

Attacks

Bite	15/7/3	d6+1s/d6w/d6+3w	LI/O
Spines	10/5/2	d4-2s/d4-2w/d4-1w	LI/O

Defenses

+2 resistance modifier vs. melee attacks
 +2 resistance modifier vs. ranged attacks
 Armor: d4 (LI), d4-2 (HI), d4-1 (En)

Skills

Stealth [10]-*sneak* [12], *shadow* [12]; Movement [10]-*race* [14]; Stamina [10]-*endurance* [14]; Awareness [14]-*intuition* [18], *perception* [16]; Investigate [14]-*track* [20]; Resolve [14]-*physical resolve* [15].

Canines are fast, intelligent, medium-sized carnivores with a developed social organization. As pack hunters, they're aggressive and dangerous, even to well-armed groups of humans. The alien canine is a canny hunter that uses sophisticated driving and ambush tactics; each pack member operates in synchronization with the others. A typical pack may include ten to twenty members.

Although the physical details may vary from world to world, a predator of this type generally has a long, powerful body, a large mouth full of sharp teeth, and blinding swiftness in the hunt. These creatures' shoulders and backs may sport heavy growths of spines, giving them effective armor of d4+2 against attacks from behind that use low impact (LI) weapons.

Coelenterate

STR 4 (d4+2) INT 1 (Animal 1)
 DEX 8 (d4+6) WIL 6 (d4+4)
 CON 6 (d4+4) PER 1 (Animal 1)
 Durability: 6/6/3/3 Action check: 9+/8/4/2
 Move: swim 16 #Actions: 1
 Reaction score: Marginal/1

Attacks

Sting (×6)	8/4/2	1s/2s/d4-1w	LI/O
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Defenses

-2 resistance modifier vs. melee attacks
 -1 resistance modifier vs. ranged attacks
 Armor: none (LI), none (HI), none (En)

Skills

Stealth [8]-*sneak* [10]; Stamina [6]-*endurance* [10]; Awareness [6]-*intuition* [10].

Coelenterates are represented by the jellyfish, anemones, and corals of Earth's oceans. They are simple, radially symmetrical animals armed with dangerous stinging tentacles. The alien coelenterate is a free-swimming creature of the same general type, though it's physically stronger and more durable. A coelenterate has a tough, rubbery body trailed by six major tentacles, a ring of eye-dots around its upper surface, and brilliant, phosphorescent markings. It swims using jet propulsion, drawing in water through a hole at the top of its body and expelling it through its open mouth on the opposite side.

The coelenterate is weak and slow by most standards, but each of its tentacles has a long row of stingers equipped with a deadly venom. This venom combines the effects of a paralytic agent and a neurotoxin (see "Poison" in *Chapter 3: Gamemasters in Action*). The onset time is 1 round, and the duration of the attack is 6 hours. The creature can only bring two of its tentacles to bear against one human-sized swimmer in a single phase—unless the swimmer is below the alien, so that the target could be enveloped by as many as all six tentacles, or unless multiple targets surround the alien, in which case the creature could use up to two tentacles against each target.

Echinoderm

STR 11	(d4+8)	INT 1	(Animal 4 or d4+2)
DEX 5	(d4+2)	WIL 8	(d4+6)
CON 10	(d6+7)	PER 1	(Animal 4 or d4+2)
Durability: 10/10/5/5		Action check: 7+/6/3/1	
Move: walk 8, swim 12		#Actions: 2	
Reaction score: Marginal/1			

Attacks

Seize	9/4/2	d4-2s/d4s/d4+2s	LI/O
Bite	12/6/3	d4w/d4+2w/d6+3w	LI/G

Defenses

+1 resistance modifier vs. melee attacks
 -1 resistance modifier vs. ranged attacks
 Armor: d6+2 (LI), d6 (HI), d6-1 (En)

Skills

Stealth [5]; Stamina [10]—endurance [12]; Awareness [8]—intuition [9]; Resolve [8].

Echinoderms are represented by the starfish, sea stars, sea cucumbers, and urchins of Earth's oceans. The alien echinoderm is a slow-moving predator that resembles a seven-armed starfish more than a meter in diameter. A diving or wading hero might stay in one place long enough for a nearby echinoderm to try to make a meal out of him. These creatures can also remain out of the water for an hour or two. Thus, a character sleeping or resting on a beach might fall prey to one of these aliens.

When an echinoderm attacks, it tries to seize its prey in its powerful arms. If the attack succeeds, the prey must defeat the creature on an opposed Strength feat check in order to escape. A successful seize attack brings the creature's mouth, located in the center of its underside, into range of its chosen meal. Unlike Earthly starfish, an alien echinoderm possesses a powerful triple beak that can bore through light armor with ease. On each subsequent action, the animal attempts to bite its held prey until the victim dies or the echinoderm is forcibly removed.

Equine

STR 17	(d6+13)	INT 3	(Animal 10 or d4+8)
DEX 8	(d4+6)	WIL 11	(d4+9)
CON 16	(2d4+11)	PER 4	(Animal 12 or d4+10)
Durability: 16/16/8/8		Action check: 10+/9/4/2	
Move: sprint 70, run 40, walk 12		#Actions: 2	
Reaction score: Marginal/1			

Attacks

Trample	15/7/3	d8s/d4+1w/d4+3w	LI/O
Tail lash	15/7/3	d4s/d6+1s/d4w	LI/O

Defenses

+4 resistance modifier vs. melee attacks
 no resistance modifier vs. ranged attacks
 Armor: d6-1 (LI), d4-1 (HI), d6-1 (En)

Skills

Movement [16]; Stamina [16]—endurance [17]; Awareness [11]—intuition [14]; Resolve [11]—physical resolve [14].

The alien equine is a large, powerful herbivore with a horselike build. It has six legs and a long, bladed whip for a tail. Its body is covered in large, leathery scales or plates. Due to the equine's intelligence and herd instincts, natives of other worlds may domesticate the creature for use as a pack animal, draft animal, or mount.

Most equines will avoid groups of humans, but might attack if startled or harassed. This animal is slightly faster than a mundane horse. It can only employ its tail lash against enemies attacking from the flank or the rear.

Feline

STR 15	(d4+12)	INT 4	(Animal 13 or d4+11)
DEX 15	(d4+12)	WIL 12	(d4+10)
CON 13	(d4+11)	PER 2	(Animal 8 or 2d4+3)
Durability: 13/13/7/7		Action check: 17+/16/8/4	
Move: sprint 80, run 48, walk 12, (jump 20)		#Actions: 3	
Reaction score: Good/2			

Attacks

Bite	14/7/3	d4+1w/d6+2w/d4+1m	LI/O
Claws	18/9/4	d4w/d4+2w/d6+3w	LI/O
Tentacles	18/9/4	d6s/d4w/d4+2w	LI/O

Defenses

+3 resistance modifier vs. melee attacks
 +3 resistance modifier vs. ranged attacks
 Armor: d4 (LI), d4-1 (HI), d4 (En)

Skills

Athletics [15]—climb [17], jump [19]; Acrobatics [15]—fall [18]; Stealth [15]—sneak [19], shadow [19]; Stamina [13]—endurance [18]; Awareness [12]—intuition [18], perception [14]; Resolve [12].

An alien feline is built along the lines of a great cat. It's a fast, powerful, large carnivore, equipped with deadly claws, fearsome jaws, and a pair of long, barbed tentacles that sprout from its shoulders. The feline is not a social animal; it's rare to encounter more than one at a time.

The feline is a hunter of devilish cunning. It may shadow a party of humans for hours, waiting for one or two

members to split off from the main group. It attacks from concealment with a great bound, covering up to 20 meters in a single leap; this leap provides a +1 penalty to the victim's Awareness check to avoid surprise—above and beyond any penalty the feline's own Stealth skill check may already dictate. Its barbed tentacles have a reach of 4 meters; the feline often uses them to knock down, trip, or pin an opponent before bringing its claws and teeth into play.

Mantis

STR 10 (d6+7) INT 2 (Animal 4 or d4+2)
 DEX 13 (d4+10) WIL 10 (d4+8)
 CON 12 (d4+10) PER 1 (Animal 4 or d4+2)
 Durability: 12/12/6/6 Action check: 14+/13/6/3
 Move: sprint 50, run 30, walk 12, fly 80 #Actions: 2
 Reaction score: Ordinary/1

Attacks

Claws (×4) 12/6/3 d6s/d4+1w/d6w LI/O
 Bite see text d4+1w/d6+1w/d4+1m LI/O

Defenses

+2 resistance modifier vs. melee attacks
 +2 resistance modifier vs. ranged attacks
 Armor: d6 (LI), d6+2 (HI), d6+1 (En)

Skills

Athletics [10]; Acrobatics [13]–*flight* [17]; Movement [12];
 Stealth [13]–*hide* [16]; Stamina [12]–*endurance* [16]; Awareness [10]–*perception* [13]; Resolve [10]–*physical resolve* [13].

This eight-legged, insectoid carnivore hunts alone. When on the ground it travels using its four back legs for locomotion; the front four legs (and their claws) can be held out ahead of the creature's body so that it's always ready to make an attack. The mantis uses its clear, large wings to engage in flight and attack with surprise from above.

The creature's four front legs can attack simultaneously (in the same phase), but only against a single target. If the mantis succeeds on two consecutive claw attacks, it automatically bites its victim in the current phase.

Mollusk

STR 13 (d6+10) INT 2 (Animal 6 or d4+4)
 DEX 11 (d4+9) WIL 7 (d4+5)
 CON 12 (d4+10) PER 1 (Animal 4 or d4+2)
 Durability: 12/12/6/6 Action check: 13+/12/6/3
 Move: walk 10, swim 50 #Actions: 2
 Reaction score: Ordinary/1

Attacks

Tentacles (×4) 14/7/4 d4s/d6+1s/d4w LI/O
 Bite 14/7/4 d4w/d4+2w/d6+1w LI/O

Defenses

+2 resistance modifier vs. melee attacks
 +1 resistance modifier vs. ranged attacks
 Armor: d6+2 (LI), d6+1 (HI), 2d4 (En)

Skills

Stealth [11]–*hide* [18]; Stamina [12]–*endurance* [16]; Awareness [7]–*intuition* [10], *perception* [8]; Resolve [7]–*physical resolve* [10].

Earth's mollusks include snails as well as cephalopods such as octopi and squid. The alien mollusk is an octopuslike creature armored with a tough mantle or shell. Unlike its Terran counterparts, the alien mollusk can drag itself about on land for short periods of up to 6 hours.

The alien mollusk has a voracious appetite and isn't afraid to attack an adult human. It can effectively use four tentacles at one time in combat, preferring to anchor itself with the rest. The mollusk attempts to overpower with its tentacle attacks; once it scores a hit with a tentacle, it wraps the limb around the victim and automatically constricts him in each subsequent action. A hero can pull away a constricting tentacle by defeating the mollusk in an opposed Strength feat check (the mollusk gains a –1 bonus because of its powerful suckers), or a hero can sever a tentacle by inflicting at least 5 points of wound damage to that limb. (This damage doesn't count against the mollusk's overall durability.) Once the mollusk has a victim secured with at least one tentacle, it delivers a vicious bite with its powerful beaked jaws.

Nematode

STR 7 (d4+4) INT 1 (Animal 3 or d4+1)
 DEX 14 (2d4+9) WIL 9 (d4+6)
 CON 6 (d4+4) PER 1 (Animal 4 or d4+2)
 Durability: 6/6/3/3 Action check: 12+/11/5/2
 Move: run 24, walk 8 #Actions: 2
 Reaction score: Ordinary/1

Attacks

Sting 8/4/2 1s/1w/2w LI/O
 Blood drain see text 1w per minute LI/O

Defenses

no resistance modifier vs. melee attacks
 +2 resistance modifier vs. ranged attacks
 Armor: none (LI), none (HI), none (En)

Skills

Stealth [14]–*sneak* [16]; Stamina [6]–*endurance* [10];
 Awareness [9]–*intuition* [10]; Investigate [9]–*track* [15]; Resolve [9]–*physical resolve* [12].

The alien nematode is a large, blood-sucking worm about 2 meters long, armed with a paralyzing sting. It lives in dank fens or marshlands, emerging at night in search of warm-blooded prey. Although the worm is sightless, it's extremely sensitive to vibration and can detect warm-blooded creatures several hundred meters away.

Typically, the nematode attacks humans while they sleep. It silently crawls up to a motionless character and stings with its tail, injecting a fast-acting paralytic agent with an onset time of just 1 phase. Many victims don't even wake up before they're immobilized. The worm then attaches its soft sucker-mouth to exposed flesh and begins to drain blood at the rate of 1 point of wound damage every 5 rounds. The nematode can drain 2d4 points of wound damage before it sates itself and detaches.

While the nematode's bite kills few healthy adults, the creature instinctively selects weak targets such as wounded characters and children. Nematodes tend to congregate in nests of 3d8 individuals.

Ophidian

STR 12 (d8+8) INT 2 (Animal 6 or d4+4)
 DEX 11 (d4+9) WIL 11 (d4+9)
 CON 8 (d4+6) PER 2 (Animal 6 or d4+4)
 Durability: 8/8/4/4 Action check: 11+/10/5/2
 Move: walk 8 #Actions: 3
 Reaction score: Ordinary/2

Attacks

Strike 16/8/4 d4+1s/d6+1s/d4w LI/O
 Constrict 14/7/4 d4+2w/d6+2w/d4m LI/O

Defenses

+2 resistance modifier vs. melee attacks
 +1 resistance modifier vs. ranged attacks
 Armor: d6+1 (LI), d6 (HI), d4 (En)

Skills

Stealth [11]-hide [14]; Stamina [8]-endurance [14]; Awareness [11]; Resolve [11]-physical resolve [14].

The ophidian is a snakelike creature the size of a python that kills through constriction. However, the alien ophidian also possesses a tough exoskeleton with daggerlike bone ribs that impale prey caught in its deadly embrace.

The creature's preferred hunting technique is to lurk in the shallows of a stream or pond and feed on animals that come to drink. It attacks with a strike of its blunt, armored head, attempting to stun its prey or knock the victim into deeper water. In the following action, the ophidian attempts to loop itself around its prey and constrict. Its embrace can only be broken by killing the creature.

The ophidian is unlikely to attack large groups, preferring to wait for solitary targets.

Piscine

STR 9 (d4+7) INT 2 (Animal 6 or d4+4)
 DEX 14 (d4+12) WIL 7 (d4+5)
 CON 5 (d4+3) PER 2 (Animal 6 or d4+4)
 Durability: 5/5/3/3 Action check: 14+/13/6/3
 Move: swim 70 #Actions: 2
 Reaction score: Ordinary/2

Attacks

Bite 10/5/2 d6s/d4w/d4+1w LI/O
 Shock 12/6/3 d8s/d6w/d12w LI/O

Defenses

+1 resistance modifier vs. melee attacks
 +2 resistance modifier vs. ranged attacks
 Armor: none (LI), none (HI), none (En)

Skills

Movement [5]; Stamina [5]-endurance [10]; Awareness [7]; Resolve [7].

The alien piscine is a fishlike creature roughly 2 meters in length. In appearance and temperament, it most closely resembles the great barracuda of Earth. Two long, thin, whiplike feelers extend from its fins. Piscines hunt in small schools of five to ten animals, though they don't employ any cooperative tactics.

While its bite is dangerous, the piscine has a far more

formidable attack at its disposal: Like the electric eel, a piscine can generate shocks to stun or incapacitate its prey. The creature delivers the shock through its long linewhips, brushing its feelers against the target from as far as 2 meters away. A piscine can deliver three shocks in a combat scene before it exhausts its electrical reserve.

Primate

STR 15 (d6+11) INT 5 (Animal 8 or 2d4+3)
 DEX 13 (d6+10) WIL 15 (d4+12)
 CON 14 (d4+12) PER 5 (Animal 8 or 2d4+3)
 Durability: 14/14/7/7 Action check: 17+/16/8/4
 Move: sprint 50, run 30, walk 10, (jump 12) #Actions: 3
 Reaction score: Good/2

Attacks

Pummel 16/8/4 d6+1s/d6w/d6+2w LI/O
 Bite 14/7/3 d4s/d6+1s/d4w LI/O
 Thrown rock 14/7/3 d4-1s/d4s/d4+2s LI/O

Defenses

+3 resistance modifier vs. melee attacks
 +2 resistance modifier vs. ranged attacks
 Armor: d4 (LI), d4-1 (HI), d4 (En)

Skills

Athletics [15]-climb [20], jump [18], throw [16]; Acrobatics [13]-fall [14]; Movement [14]; Stamina [14]-endurance [18]; Awareness [15]-intuition [18], perception [18]; Investigate [15]-search [16]; Resolve [15].

The alien primate is taller, thinner, and much longer of limb than a gorilla, although it still outweighs an adult human by 30 to 40 kg. The creature possesses gray, leathery skin with a mane of stiff bristles and hairy patches on its lower arms and legs.

Alien primates avoid humans in the open forest or jungle, unless the primates outnumber the human by more than two to one. However, these creatures become extremely aggressive when defending their lair. Primates are very social creatures that live in troops or packs of up to forty members.

Rodent

STR 4 (d4+2) INT 2 (Animal 7 or d4+5)
 DEX 14 (d4+12) WIL 7 (d4+5)
 CON 3 (d4+0) PER 4 (Animal 13 or d4+11)
 Durability: 3/3/2/2 Action check: 15+/14/7/2
 Move: sprint 60, run 40, walk 12, (jump 10) #Actions: 2
 Reaction score: Good/1

Attacks

Dart 16/8/4 1s/2s/1w LI/O
 plus poison (see text)

Defenses

+1 resistance modifier vs. melee attacks
 +3 resistance modifier vs. ranged attacks
 Armor: d4-1 (LI), none (HI), d4-1 (En)

Skills

Athletics [4]-jump [10], throw [8]; Acrobatics [14]-fall [16]; Stealth [14]-hide [19]; Stamina [3]; Awareness [7]-intuition [10].

The alien rodent is a small omnivore about the size of a large jackrabbit. It's covered in green and brown fur that blends well with its surroundings, making it very difficult to spot when it's in normal ground cover. It has powerful hind legs, useful for leaping to make quick getaways, and short front limbs suited for digging up insects. Typically, each colony consists of dozens of individuals sharing a maze of twisting burrows.

The rodent bolts from almost any conceivable threat, but it also has a dangerous defense mechanism: a hump over its shoulders that contains a battery of four poisoned darts, propelled by an air bladder. The creature can fire these darts out to 4/8/12 meters (short, medium, and long range). Although these darts inflict minimal damage, they have a powerful, irritating venom (+2 penalty to the victim's Constitution feat check) with an onset time of 2 rounds and a duration of 6 hours.

Saurian

STR 20 (2d4+15) INT 3 (Animal 10 or 2d4+5)
DEX 9 (d4+5) WIL 10 (d4+8)
CON 18 (2d6+11) PER 2 (Animal 7 or d4+5)
Durability: 27/27/13/13 Action check: 13+/12/6/3
Move: sprint 50, run 30, walk 16, (jump 16) #Actions: 3
Reaction score: Ordinary/2

Attacks

Bite	22/11/5	2d6w/d4+1m/d6+2m	LI/G
Claw/kick	22/11/5	d4+3w/d6+4w/d4m	LI/G
Tail lash	18/9/5	d8s/d12s/d6w	LI/G

Defenses

Good toughness
+3 resistance modifier vs. melee attacks
no resistance modifier vs. ranged attacks
Armor: d6+2 (LI), d4+1 (HI), d6+1 (En)

Skills

Stealth [9]; Movement [18]; Stamina [18]—endurance [22]; Awareness [10]—intuition [14], perception [12]; Investigate [10]—search [12]; Resolve [10]—physical resolve [16].

The alien saurian is a large and deadly predator, having the size and build of a dinosaur such as the allosaurus or gorgosaurus. A saurian isn't quite as big as a tyrannosaur, but it's faster and smarter, and equipped with teeth and claws that would put a T-rex to shame.

Despite its size and bulk, the saurian is moderately stealthy. It prefers to find a patch of good cover—a grove, thicket, or boulder-fall—and wait for prey to wander within range of a quick, deadly rush. It can strike with a terrifying bite, a kick from its sickle-clawed leg, and a whiplike tail lash against anyone behind it. Saurians are extraordinarily fearless and bloodthirsty.

Trilobite

STR 8 (d4+6) INT 1 (Animal 4 or d4+2)
DEX 12 (d4+10) WIL 9 (d4+7)
CON 6 (d4+4) PER 2 (Animal 6 or d4+4)
Durability: 6/6/3/3 Action check: 9+/8/4/2
Move: run 30, walk 10, swim 10 #Actions: 2
Reaction score: Marginal/1

Attacks

Bite	10/5/2	d4s/d4w/d4+2w	LI/O
Acid jet	10/5/2	d4w/d4+2w/2d4+1w	LI/G

Defenses

+1 resistance modifier vs. melee attacks
+2 resistance modifier vs. ranged attacks
Armor: d4+3 (LI), d4+1 (HI), d4+2 (En)

Skills

Stealth [12]—hide [14]; Stamina [6]—endurance [10]; Awareness [9]—intuition [12]; Resolve [9].

Trilobites were a group of arthropodlike animals that vanished from primeval Earth before the rise of the dinosaurs. They were armored with an articulated shell, somewhat similar to modern horseshoe crabs. The alien trilobite shares the general appearance of these ancient animals, but is considerably larger and more advanced. It's more than a meter long and nearly as wide, with dozens of small, clawed legs useful for scuttling about in shallow waters or along nearby coasts.

The creature has a small reservoir of extremely potent organic acid that it squirts through a snoutlike projection on top of its shell. This stuff has a range of 6 meters and Good firepower, cutting through most armors with ease. The trilobite can use this attack form once every 12 hours.

Ursine

STR 17 (2d4+12) INT 5 (Animal 14 or d4+12)
DEX 11 (d4+9) WIL 14 (d4+12)
CON 16 (2d4+11) PER 4 (Animal 13 or d4+11)
Durability: 24/24/12/12 Action check: 15+/14/7/3
Move: sprint 60, run 40, walk 10 #Actions: 4
Reaction score: Good/2

Attacks

Bite	20/10/5	d4w/d4+2w/d4+4w	LI/G
Claws	20/10/5	d6s/d4w/d6+1w	LI/G

Defenses

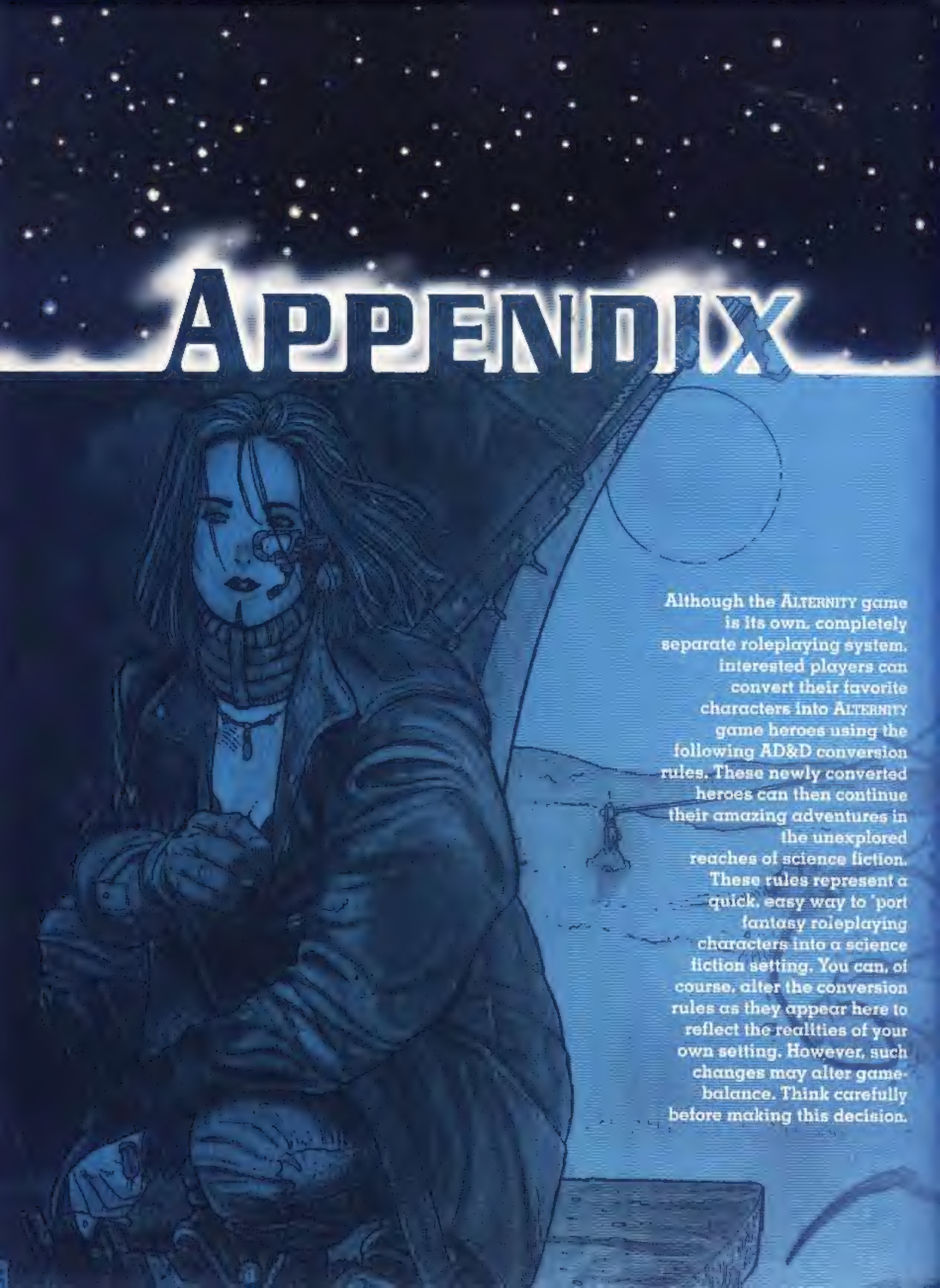
Resistant to toxins (see text)
+4 resistance modifier vs. melee attacks
+1 resistance modifier vs. ranged attacks
Armor: d6+1 (LI), d4+1 (HI), d6 (En)

Skills

Athletics [17]; Movement [16]; Stamina [16]—endurance [20]; Awareness [14]—intuition [16]; Investigate [14]—search [16], track [16]; Resolve [14]—physical resolve [20].

The alien ursine is a bearlike creature covered in thick, loose folds of tough hide. It has claws and teeth of extraordinary sharpness. Its baggy hide gives it a clumsy, slow-moving appearance, but there's nothing awkward about the ursine's ability to deal out damage in a fight. In addition to its great physical power, the ursine is quite intelligent. It employs a variety of ruses, distractions, and cooperative tactics in order to close with its prey. Ursines almost always hunt in twos or threes, taking turns driving prey toward each other and sharing their kills.

The ursine is virtually immune to most known poisons and drugs, gaining a +4 bonus on any Constitution feat checks called for by exposure to various toxins.



APPENDIX

Although the ALTERNITY game is its own, completely separate roleplaying system, interested players can convert their favorite characters into ALTERNITY game heroes using the following AD&D conversion rules. These newly converted heroes can then continue their amazing adventures in the unexplored reaches of science fiction. These rules represent a quick, easy way to 'port fantasy roleplaying characters into a science fiction setting. You can, of course, alter the conversion rules as they appear here to reflect the realities of your own setting. However, such changes may alter game-balance. Think carefully before making this decision.

ABILITY SCORES

The AD&D system rates initial character Ability Scores on a scale of 3 to 19, while ALTERNITY grades them from 4 to 16 during initial hero generation. Consult the table below and record the character's new Ability Scores:

AD&D	Alternity
3-4	4
5-6	5
7	6
8	7
9-10	8
11-12	9
13-14	10
15	11
16	12
17	13
18	14
19	15
20	16

Remember that 14 represents the highest maximum Ability Score for human heroes in the ALTERNITY game. If an AD&D character's Ability Score converts to a number higher than 14, you must reduce it to 14.

RACE

Obviously, a human converts over to a human, but there's one change you should be aware of: Humans of a medieval fantasy setting acquire Animal Handling instead of Vehicle Operation.

Demihumans convert to aliens, with the modifications to their base broad skills and special powers.

Dwarves

Dwarves receive the following broad skills at no cost: Athletics, Stamina, Knowledge, Awareness, Resolve, and Interaction.

Magic and Poison Resistance: Dwarves gain an increase of +2 to their resistance modifiers against Arcane Magic and Faith FX specialty skills (see *Chapter 16: Optional Rules*). Dwarves also gain a -2 bonus to Constitution feat checks caused by poison and radiation.

Defensive Skill: Dwarves add +2 to their resistance modifiers against melee attacks or unarmed attacks from humanoids 3 meters or taller in height.

Infravision: Dwarves ignore any penalties that apply in situations of low illumination or total darkness—provided there are objects producing variant radiant heat in the area.

Mining Skills: Dwarves possess a special Will-based broad skill that allows them to check for the following phenomena:

Detect grade or slope	-2 step bonus
Detect new construction	-2 step bonus
Detect sliding/shifting walls or rooms	-1 step bonus
Detect stonework traps, pits, and deadfalls	no modifier
Detect approximate depth underground	no modifier

Elves

Elves receive the following broad skills at no cost: Athletics, Melee Weapons or Primitive Ranged Weapons (player's choice), Stealth, Knowledge, Awareness, and Interaction.

Charm Resistance: Elves gain an increase of +4 to their resistance modifiers against all Arcane Magic, Faith, and Super Power charm or sleep FX specialty skills (see *Chapter 16: Optional Rules* for more details), as well as charm- and sleep-like mindwalking powers.

Infravision: Elves ignore any penalties that apply in situations of low illumination or total darkness—provided there are objects producing variant radiant heat in the area.

Secret Door Detection: Elves gain a -2 bonus to their Investigate-search checks. If the elf doesn't have the Investigate skill, he gains this step bonus to his untrained skill rolls.

Gnomes

Gnomes receive the Athletics, Stamina, Manipulation, Knowledge, Awareness, and Interaction broad skills at no cost.

Magic Resistance: Gnomes gain an increase of +2 to their resistance modifiers against Arcane Magic and Faith FX specialty skills.

Defensive Skills: Gnomes add +2 to their resistance modifiers against melee attacks or unarmed attacks from humanoids 2.5 meters or taller.

Infravision: Gnomes ignore any penalties that apply in situations of low illumination or total darkness—provided there are objects producing variant radiant heat in the area.

Mining Skills: Gnomes gain a Will-based broad skill that allows them to check for the following phenomena:

Detect grade or slope	-2 step bonus
Detect new construction	-2 step bonus
Detect sliding/shifting walls or rooms	-1 step bonus
Detect stonework traps, pits, and deadfalls	no modifier
Detect approximate depth underground	no modifier

Halflings

Halflings have the following broad skills at no cost: Stamina, Stealth, Knowledge, Awareness, Resolve, and Interaction.

Magic and Poison Resistance: Halflings gain an increase of +2 to their resistance modifiers against Arcane Magic and Faith FX specialty skills. Halflings also gain a -2 bonus to Constitution feats caused by poison and radiation.

Throwing Bonus: Halflings gain a -1 bonus when using Athletics-throw. If a halfling doesn't possess this skill, he receives the bonus to an untrained check.

Infravision: Stout halflings ignore any penalties that apply in situations of low illumination or total darkness—provided there are objects producing variant radiant heat in the area. Mixed-halfling infravision negates up to +2 penalties for near or total darkness.

Half-Elves

Half-elves receive the following broad skills at no cost: Athletics, Stealth, Stamina, Knowledge, Awareness, and Interaction.

Charm Resistance: Half-elves gain +2 to their resistance modifiers against Arcane Magic, Faith, and Super Power charm or sleep FX specialty skills (see Chapter 16: Optional Rules for more details) as well as charm- and sleep-like mindwalking powers.

Infravision: Half-elves ignore any penalties that apply in situations of low illumination or total darkness—provided there are objects producing variant radiant heat in the area.

Secret Door Detection: Half-elves gain a -1 bonus to their Investigate-search checks. If the half-elf doesn't have the Investigate skill, he still gains this bonus to his untrained skill rolls.

CONVERTING CLASS TO PROFESSION

The next step in the conversion process is selecting a profession that corresponds to the character's class. The suggested guidelines and special notes are listed below:

Fighter →	Combat Spec
Paladin →	Combat Spec
Ranger →	Combat Spec
Cleric →	Diplomat
Druid →	Diplomat
Thief →	Free Agent
Bard →	Diplomat
Mage →	Tech Op
Specialist Wizard →	Tech Op

Fighter

If the character is a weapon specialist, he should select a specialty skill which represents the weapon type in which he specializes for his Combat Spec attack skill bonus. For example, if a fighter specializes in the long sword, he should assign his special bonus to the Melee Weapons-blade skill.

Paladin

Paladins retain several of their special benefits, as shown below. Paladins must select the Faith perk during conversion.

Detect Evil: With a successful Awareness check, a paladin can detect evil intent at up to 20 meters.

Saving Throw Bonus: Paladins get a -1 bonus when resisting any kind of damage; this applies to Constitution feat checks against hazards.

Disease Immunity: Paladins receive a -3 bonus when resisting disease.

Healing: Once per day, paladins may heal 1 wound box per level by laying on hands. They can also cure disease once per week for every 5 levels they possess.

Magic: Paladins can use magic at 9th level and higher (see the "Magic" section below).

Ranger

Rangers must select the Investigate-track and Stealth skills during character conversion. Class benefits translate in the following fashion:

Two-weapon fighting: If the ranger wears armor with an action penalty of +1 step or less, he can fight with a

weapon in each hand at no penalty. Heavier armor negates this benefit.

Tracking: Rangers gain a -2 bonus to all Investigate-track skill checks, and automatically gain 1 rank in Investigate-track for every 3 character levels (3rd, 6th, 9th, etc.) they possess.

Species Enemy: Against one type of enemy, the ranger gains a -2 bonus to attack skill checks, but the ranger suffers a +2 penalty to any encounter skills he attempts to use.

Animal Handling: When a ranger uses this skill, he gains a -1 bonus for every 3 character levels (-1 at 3rd, -2 at 6th, etc.) he possesses.

Magic: Rangers can use magic, beginning at 8th level. See "Magic" section for more details.

Mages and Specialist Wizards

A wizard's major power is the ability to employ spells (see the "Magic" section for more information). Thus, wizards receive the Arcane Magic FX broad skill for free. In addition, wizards can wear any armor that does not inflict an action check penalty (for example, the CF coat) and still cast spells.

While most wizards possess minimal weapon skills when first converted, they may acquire any new skills and wield any weapons once they leave their homeworlds.

Specialist Wizard Saving Throw Modifier: When a specialist wizard uses an Arcane Magic FX specialty skill from his preferred school, the target suffers a +1 penalty to resist that specialty skill (see the "Magic" section for more details).

Clerics

Magic is the chief weapon of the cleric; see the "Magic" section below. Clerics cannot use weapons that spill blood, so Melee Weapons-bludgeon weapons remain their first choice. Stutter weapons and any other weapons that only inflict stun damage are also acceptable. Clerics must select the Faith perk during character conversion, and they receive the Faith FX broad skill free.

Druids

Druids must select the Life Science broad skill and the botany and zoology specialty skills during the conversion process. They use magic, described below, and retain the several special benefits.

Identify plants, animals, and pure water: When a druid uses *botany* or *zoology* to identify lifeforms, he gains a +1 bonus for every 3 levels.

Pass through overgrown areas: At 3rd level, the druid automatically acquires the *Movement-trailblazing* skill at no cost.

Thieves

Thieves must select the *Stealth* and *Manipulation* broad skills during conversion, and they must buy at least 1 rank in *Athletics-climb*. There are no other special conversion notes for thieves.

Bard

All bards must select the *Entertainment* and *Manipulation* broad skills, as well as at least 1 rank in *Athletics-climb*. Bards gain the ability to cast wizard spells, beginning at 3rd level (see the "Magic" section for more details).

Influence reactions: Bards gain a +1 bonus for every three levels (+1 at 3rd, +2 at 6th, etc.) to any encounter skills they attempt to use after a successful use of their *Entertainment* skill.

Inspire allies: If a bard chooses to inspire his allies in combat, all affected characters gain a +1 bonus to their attack rolls and a +1 increase to their resistance modifiers. The bard must play for 3 rounds to inspire his friends, and the effects last 1 round per level.

LEVEL

A character's level in the AD&D game system is translated directly to his level in the ALTERNITY game. For example, a 3rd-level paladin becomes a level 3 *Combat Spec*. The character is entitled to all the additional skill points or achievement benefits appropriate for his level. For example, a level 2 character has 6 extra skill points to distribute, a level 3 character has 13, a level 4 character 21, and so on.

Hit points, THACO, and saving throw scores vanish.

In general, high-level AD&D characters fall into the "Advanced Heroes" rules (found in *Chapter 2: Hero Creation*) for starting characters at higher than level 1. They'll have more broad and specialty skill slots available, and more skill points to distribute.

Level Advances

From the moment when an AD&D character becomes an ALTERNITY hero, he no longer advances as an AD&D character. No level-based benefits—such as new spells, special followers, or new class abilities—accrue. Whatever powers and abilities the hero possesses at the time of conversion are all that he's ever going to get; benefits provided by the ALTERNITY rules are perfectly fine.

SKILLS

Refer to *TABLE P5: HERO STARTING SKILL POINTS* in the *Player's Handbook*, and check the hero's new Intelligence score. This gives you the total number of broad and specialty skills the hero may have, along with the number of skill points available. After purchasing any skills mandated by the hero's class or weapon skills, you should have some "leftover" skill points to spend. Use these to round out the character's skills, converting as many of his nonweapon proficiencies as you can.

There are three general guidelines you should follow in converting nonweapon proficiencies (NWP) to skills:

- ▶ If the NWP name matches the name of an existing skill (*Swimming* to *Movement-swim*, for instance) convert the AD&D proficiency directly. You may have to buy a new broad skill in order to find a match in the specialty skills.

- ▶ If the NWP doesn't have a corresponding skill, use your best judgment and try to select skills that parallel what the character previously had. For example, *Charioteering* could easily become a specialty under the *Athletics* broad skill.

- ▶ If there seems to be no corresponding skill, try to find a skill that relies on the same Ability Score as the nonweapon proficiency. For example, *Weather Sense* could convert to a specialty skill under *Physical Science*. If none of these work, draft a new broad skill description.

Depending on the character's Intelligence and level, it may be necessary for him to lose a few skills in order to make the conversion. Choose nonweapon proficiencies that are least important to the character concept and get rid of them for now.

Combat Skills

Choose the broad skills that the character must acquire in order to wield weapons in which he has proficiency. Almost all characters will be proficient in some kind of melee weapon, so they'll need the *Melee Weapons* broad skill. Many characters should also select the *Primitive Ranged Weapons* broad skill. If a character specializes in an unarmed fighting style, he should select *Unarmed Attack* or *Acrobatics-defensive martial arts*.

Heroes with unmodified THACOs better than 20 should purchase 1 specialty skill rank per 2 points of improvement in the weapon or weapons they typically use. For example, a 7th-level fighter has a THACO of 14, which is 6 points better than a 20. If he uses a long sword, he should purchase *Melee Weapons-blade 3*.

Remember, higher-level characters must pay for the skill levels they acquire. For example, starting with *blade 3* costs 9 skill points (2+3+4=9) for a *Combat Spec* hero.

MAGIC AND SPECIAL POWERS

Magic is generally not the mainstay of a science fiction setting. Thus, the default conversion rule is as follows: Magic simply doesn't work in the ALTERNITY game. If a wizard, cleric, or other magic-using character adventures in an SF setting, they can't access their magical spells and abilities.

However, many people will want to include magic in their campaigns. You can include magic in your universe by utilizing the FX rules found in *Chapter 16: Optional Rules*. This allows you the flexibility of magic, while maintaining an SF feel.

Before magic-using heroes can cast spells, they must purchase either the *Arcane Magic* or *Faith* FX broad skills. Converted wizards and priests receive their respective FX broad skills for free. Then, they must convert their existing AD&D spells into FX specialty skills.

CONVERTING SPELLCASTERS IN A MAGICAL UNIVERSE

Conversion rules for AD&D characters are as follows: A character retains any spellcasting or magical abilities he had under the AD&D rules, replacing them with FX abilities. At the time of conversion, each character receives a number of skill points with which to convert AD&D spells into FX specialty skills according to the following progression: wizards, clerics, druids and specialty priests receive 7 points per level, rangers receive 5 points per level above 8th, and paladins receive 5 points per level above 9th. For example, a level 4 druid has 28 points to spend on FX specialty skills. Converted characters cannot use these spell points to purchase other non-FX skills—though they can use their regular allotment of skill points to buy FX specialty skills.

Magic-using heroes must spend their skill points on converting spells to FX abilities. A player must examine each spell and pay *all* costs necessary to convert it to an FX ability. Thus, high-level spells and spells that inflict great amounts of damage cost more than low-level ones.

Because of the nature of the FX rules, many AD&D spells will not retain their maximum effectiveness, or they will cost too much to purchase—forcing the hero (especially high-level wizards) to lose a good number of spells. You can choose to grant spells to the heroes at a fraction of their cost (or at no cost at all), depending on the amount of magic in your campaign. However, you should enforce the total point cost when heroes wish to purchase a new FX specialty skill. In this way, you can regulate the influx of magic in your science fiction setting.

Converting Nondamaging Spells

For most nondamaging spells, you must apply your judgment to determine the costs involved. In general, a 2-point penalty in the AD&D system is roughly equal to a 1-step penalty in the ALTERNITY rules. Thus,

a spell that improves the caster's Armor Class by 2 should instead increase his resistance modifier against physical attacks by +1.

Other Spells

Other spells have their normal effects as much as possible—for example, a *knock* FX specialty skill could open an electronic lock as easily as a stout bolt, while the *silence 15' radius* FX specialty skill does just what it should. For purposes of Hit Dice affected, an ALTERNITY character or creature has a number of Hit Dice equal to its level (for characters) or one-half its Constitution (for creatures).

◆ **Example:** Marlo is in the process of converting an AD&D mage over to an ALTERNITY hero. Currently, she is evaluating the *magic missile* spell. Using the FX rules, she creates the following FX specialty skill description:

Magic Missile

Arcane Magic, Conjure spell: WIL; Ordinary quality, cost 9

This specialty skill allows the caster to manipulate energy into small bolts or "missiles" that inflict Ordinary Energy (En) damage. The caster makes a skill check against this specialty skill to determine the amount of damage: Critical Failure, missile attacks a random target; Marginal, d4–2w (minimum 1); Ordinary, d4–1w; Good, d4w; Amazing, d4+1w.

This skill functions at the ranges of 10, 20, and 30 meters. The caster receives a –1 bonus to his skill check at short range (10), no modifier at medium range (20), and a +1 penalty to his skill check at long range (30).

A hero receives one extra missile at skill ranks 3, 6, 9, and 12. Thus, a hero with *magic missile* 6 can fire three missiles in a single combat round (one each phase, with the remainder firing on the last phase of the round).

After designing the specialty skill, Marlo checks Table G71 in Chapter 16 to figure out the total cost of the skill. She determines that the *magic missile* specialty skill costs 9 points to buy. Of course, she could add trapings to the skill to lower this point cost.

EQUIPMENT

The equipment list for PL 1 to PL 3 in the *Player's Handbook* is short; the game is intended to reflect modern to far-future roleplaying. There are a few weapons and armors that can translate directly—for example, the spear, short sword, broad sword, leather armor, chain mail, or plate mail.

Where possible, use the statistics as given. For example, if an AD&D character happens to wear plate mail, use the stats for plate mail. If the match isn't perfect, loosely translate the hero's equipment to match. A long sword and broad sword are similar enough to use the same stats in while studded leather armor is pretty close to normal leather armor.

You can also tweak the weapon and armor lists to get the exact stats you want. For example, a two-handed sword is somewhat larger and more powerful than a broad sword; if you simply add +1 or +2 to the broad sword's damage ratings, you'd have something approximating an AD&D two-handed sword. Similarly, banded mail is a little better than chain mail, so a suit of banded mail might offer a modest increase in protection over the normal chain mail stats.

Magical Items

Use the Super Power–*enchanted relic* FX rules for building magical items.

FANTASY HEROES IN A MODERN GAME

Traditional class roles of AD&D characters are likely to change as they adapt to the ALTERNITY system. For example, the hit points and fighting abilities of the fighter and the mage won't be that much different, but clerics are no longer the first aid kits of the party—especially if they lose their magical powers. A good role-player will pick up on this shift and portray his character accordingly. How does a priest of Odin reconcile his beliefs with the fact that he no longer receives spells? Can a wizard turn his inquisitive mind to the study of science? Encourage your players to think about how their characters perceive this change in the universe around them.

This index references both the *Game-master Guide* and the *ALTERNITY Player's Handbook*. Page numbers printed in blue refer to the *Gamemaster Guide*.

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Ship Design Record Form

Ship name: _____

Hull type: _____

Captain's name: _____

Hull size: _____

Maneuver rating: _____

Acc: _____

Cruising speed: _____

Starfall distance: _____

Dur: _____

Hit on: _____

Dur: _____
Hit on: _____

Dur: _____
Hit on: _____

Dur: _____
Hit on: _____

Dur: _____
Hit on: _____

Dur: _____
Hit on: _____

Dur: _____
Hit on: _____

Dur: _____
Hit on: _____

Dur: _____
Hit on: _____

Dur: _____
Hit on: _____

Dur: _____
Hit on: _____

Dur: _____
Hit on: _____

Weapons:

Acc Range / / Type Damage / / Actions

Acc Range / / Type Damage / / Actions

Acc Range / / Type Damage / / Actions

Armor: LI HI En

Defenses:

Engines:

Power plant:

Sensors:

Communications:

Computer(s):

Other equipment:



SUPPORTING CAST STATISTICAL FORM

To help you read and organize information about supporting cast members presented in published adventures and accessories, this statistical form has been provided. For the sake of example only, this character makes use of all the optional rules in the *Player's Handbook*: psionics, cybernetics, and mutations.

The character's name.

Here are species, profession, and achievement level. For Diplomats, a secondary profession is also listed.

Ability Scores are the next piece of information. Ability Scores may be altered by perks, achievement benefits, mutations, or cybernetics.

Durability, action check scores, movement rates, actions per round, reaction scores, and last resort points are determined from Ability Scores, but may be altered by options.

Attack forms list an appropriate skill score, damage, and type.

A complete list of the character's skills in order of their related Ability Scores (STR, DEX, CON, INT, WIL, PER) appears here. Broad skills and scores (using a +d4 base situation die) are in roman type; specialty skills and scores (using a +d0 base situation die) are in *italic*.

Cyber gear, if any, is listed here.

Advantageous mutations and drawbacks, if any, are listed here.

Yatril Tor

Level 1 human Diplomat (Mindwalker)

STR	8	[+1]	INT	12	[+1]
DEX	11	[+1]	WIL	11	[+1]
CON	9		PER	11	

Durability: 9/9/5/5 Action check: 12+/11/5/2

Move: sprint 18, run 12, walk 4 #Actions: 2

Reaction score: Ordinary/2 Last resorts: 2

Perks: Tough as Nails, Psionic Awareness

Flaws: Bad Luck, Temper (moderate)

Psionic energy points: 6

Cyber tolerance score: 3/3/2

Attacks

Unarmed-brawl	9/4/2	d4s/d4+1s/d4+2s	LI/O
11mm ch pistol	12/6/3	d4+2w/d6+2w/d4+1m	HI/O

Defenses

CF softsuit: d6 (LI), d6 (HI), d6-1 (En)

Skills

Athletics [8]; Unarmed [8]-*brawl* [9]; Modern [11]-*pistol* [12]; Vehicle Operation [11]; Stamina [9]; Knowledge [12]-*language (English)* [15]; System Operation [12]; Awareness [11]; Culture [11]-*diplo-*
macy [12], *etiquette (Terran Empire)* [12]; Interac-
tion [11]-*charm* [12], *taunt* [12]; ESP [12]-*mind read-*
ing [13]; Telepathy [11]-*suggest* [12].

Gear

Comm gear, first aid kit, computer gauntlet, suitcase, formal dress, vacuum mask, English-German dictionary.

Cyber gear

Cyberoptics

Mutations

Enhanced Intelligence, Wild Immune System

Yatril Tor represents the culmination of years of research into constructing the perfect diplomat. A tall, handsome human decked out in fine designer clothes, he's a pleasant, if oily, administrator who's subject to bouts of anger and fury that hamper his performance in delicate negotiations. This failing was never more apparent than when he served . . .

Alongside Ability Scores appear resistance modifiers for each Ability. Resistance modifiers may be altered by perks and skill rank benefits.

Perks and flaws are listed here.

If a character has cyber gear or psionic talents, appropriate scores are here.

Defenses can be found here. Armor, the most common defense, lists values against low impact (LI), high impact (HI), and energy damage (En). More unusual or exotic defenses, such as ablative screens or deflection inducers, may be listed as well.

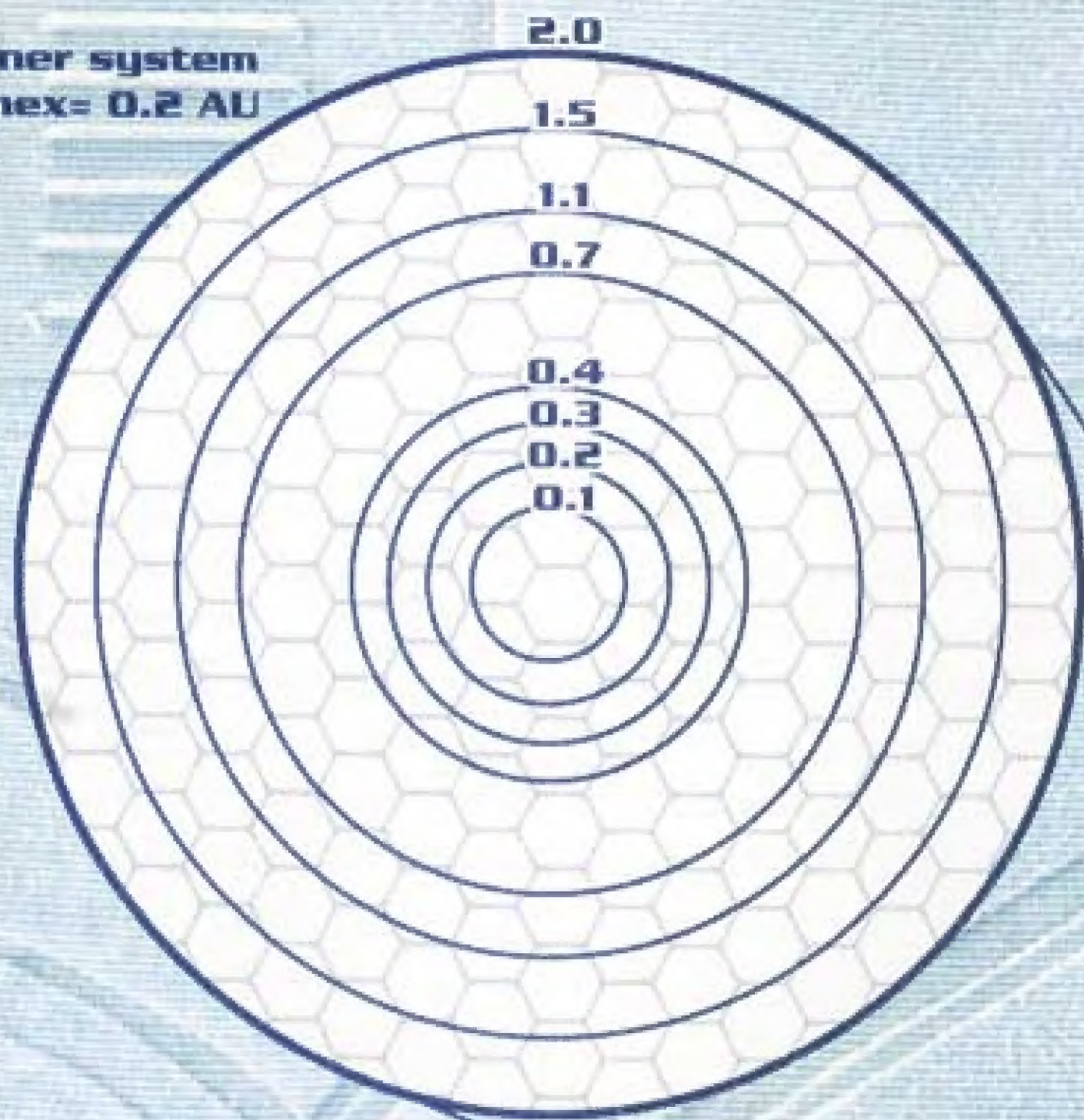
A Mindwalker's or talent's psionic skills are listed at the end, in Ability Score order.

Noteworthy equipment appears here.

The text following the character's statistics typically provides facts on background, behavior, and appearance.

System Record Form

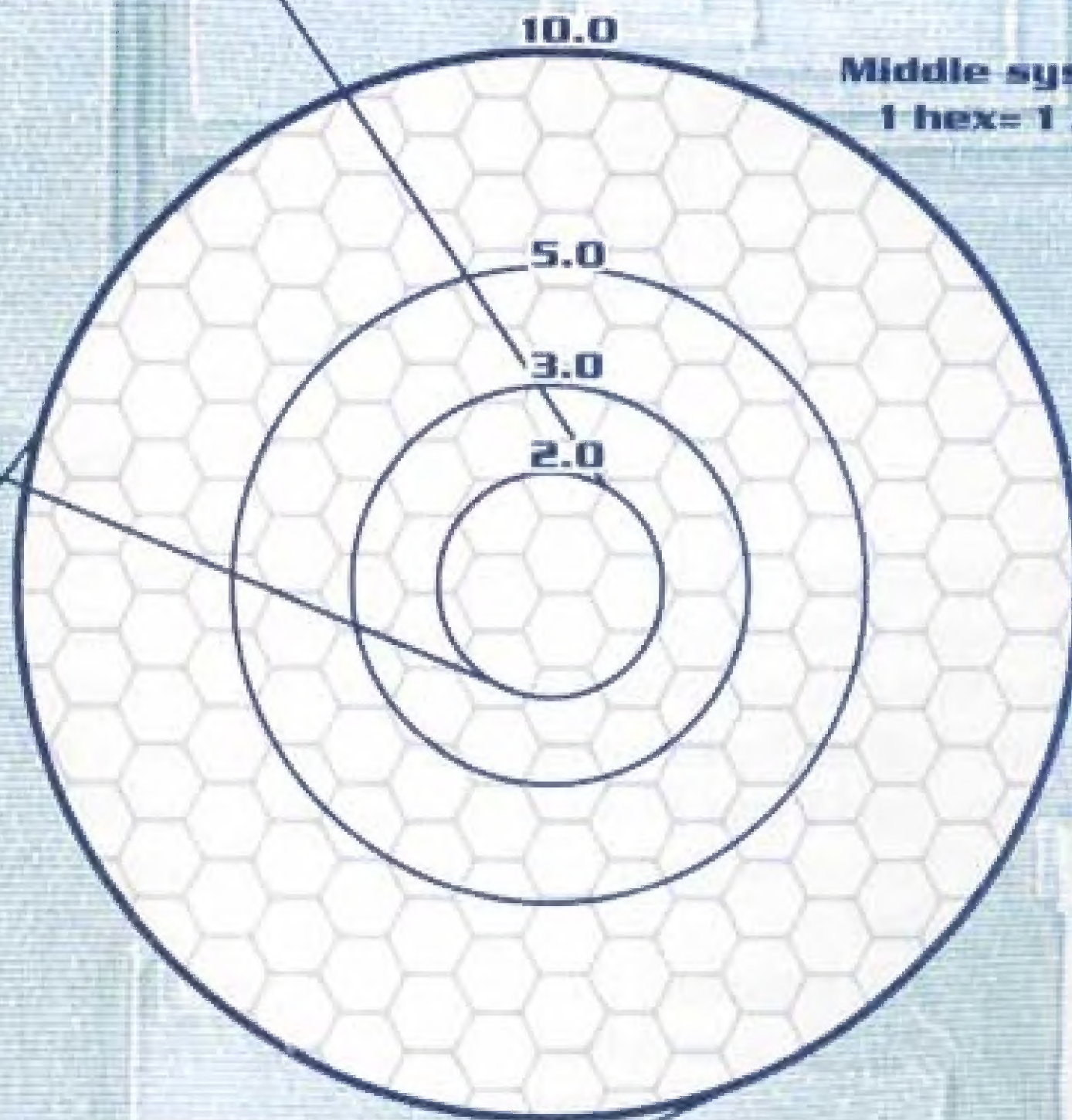
Inner system
1 hex = 0.2 AU



Star name & class

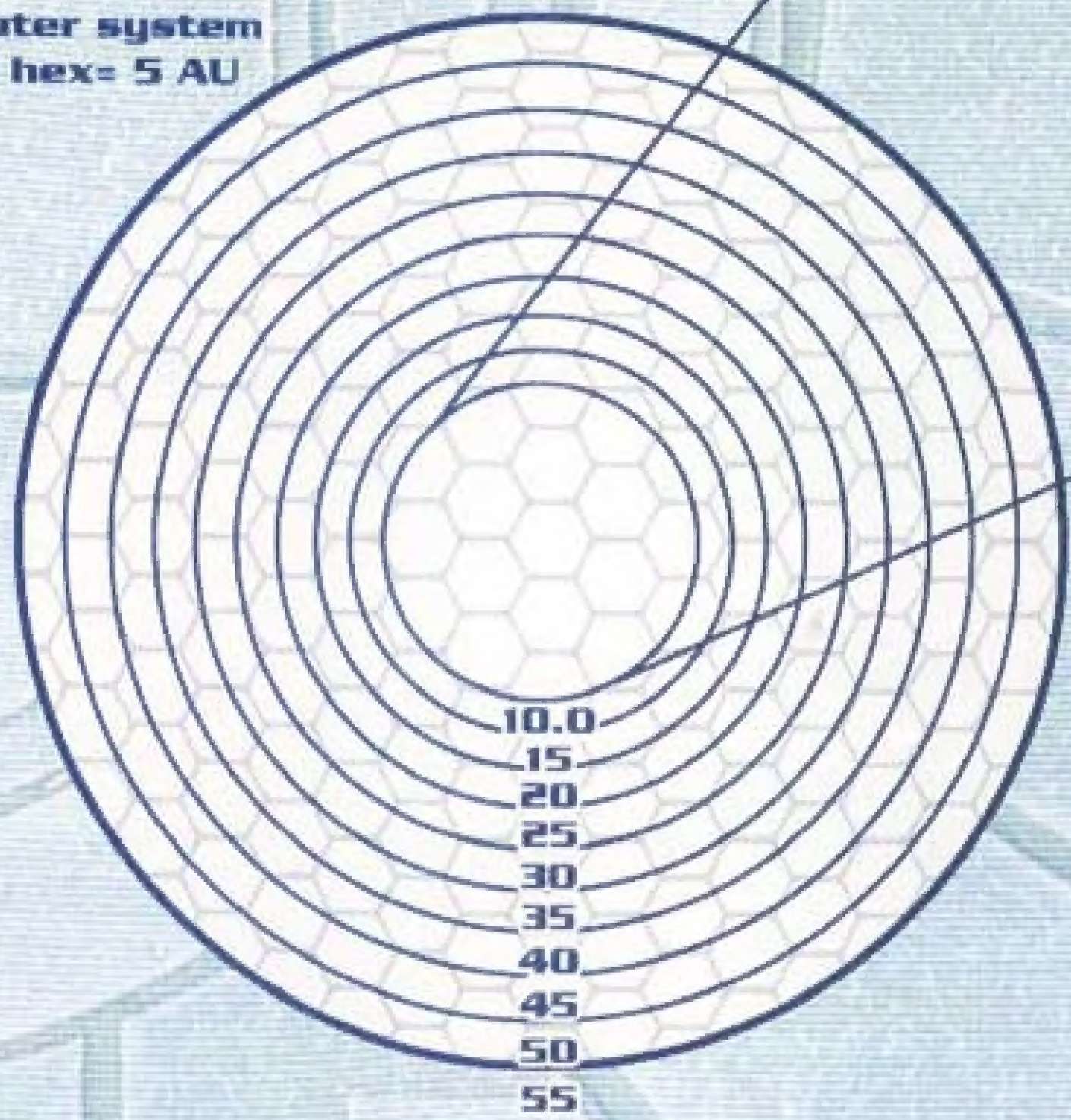
[illegible]

Middle system
1 hex = 1 AU



Orbit	Planet type	Moons
_____	_____	_____
_____	_____	_____
_____	_____	_____

Outer system
1 hex = 5 AU

[illegible]

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